

KILCOCK. CO MEATH

Residential Development at
Newtownmoyaghty, Kilcock, Co. Meath
Architect & Urban Designers' Report
An Bórd Pleanála, December 2019





CONTENTS



- 1.0 INTRODUCTION
- 1.1 Description of Proposals 4

- 2.0 SITE ASSESSMENT
- 2.1 Location 5
- 2.2 Site Description 5
- 2.3 SWOT Analysis 6

- 3.0 PROPOSED DEVELOPMENT
- 3.1 Description 7
- 3.2 Vision 7
- 3.3 Context 8
- 3.4 Connections & Movement 9
- 3.5 Inclusivity & Interfaces 11
- 3.6 Variety 12
- 3.7 Efficiency & Density 13
- 3.8 Distinctiveness 14
- 3.9 Layout 18
- 3.10 Public Realm 19
- 3.11 Adaptability 20
- 3.12 Privacy & Amenity 20
- 3.13 Parking Cars & Bicycles 21
- 3.14 Detailed Design 22

- 4.0 BUILDING DESIGN
- 4.1 House Types 23
- 4.2 Duplex Design 24
- 4.3 Apartment Design 25

- 5.0 DEVELOPMENT STANDARDS
- 5.1 DMURS 26
- 5.2 Childcare Facilities 27
- 5.3 Universal Design 28

- 8.0 SUMMARY 29

1.0 INTRODUCTION & SITE DESCRIPTION

1.1 Description of Proposals

McGarrell Reilly Homes are applying for this Strategic Housing Development application to An Bórd Pleanála. The site is located on land at Newtownmoyaghy, Co. Meath, a part of the town of Kilcock.

The site is located east of the town centre and mainly within one kilometre of the centre. It is serviced by the recently constructed distributor road, facilitating concentric development of the town in the manner of the traditional organic growth of many Irish settlements.

The proposed development comprises 575 No. residential dwellings with a total area of 24.24 hectares. The residential areas are across 2 sections of the site, with a combined area of 14.45 hectares of residential zoned land. The northern site (8.38Ha) will facilitate the development of 309 No. residential dwellings while the site to the south (6.07Ha) will provide for 266 no. residential units. The layout will provide for a mix of dwellings and will include 388 no. housing units in the form of detached, semi-detached and terraced houses, 121 no. duplex units and 66 no. one and two bedroom apartments. A net density of 39.8 units per hectare will be achieved across both sites.

Total SHD application site area:	24.24Ha
North site in residential zoning:	8.38Ha
South site in residential zoning:	6.07Ha
Total north & south sites in residential zoning:	14.45Ha
Total in Community/Social/Educational zoning:	2.82Ha

The proposed development also contains 9.60Ha of open space in two main sections, each located to the south of each residential section, and a creche with associated external play area.

Note, for clarity, while the GAA pitch is shown in colour in the figures it does not form part of this application, but is shown as it does influence the design of the proposed development. The development does include a GAA changing room.



2.0 SITE ASSESMENT

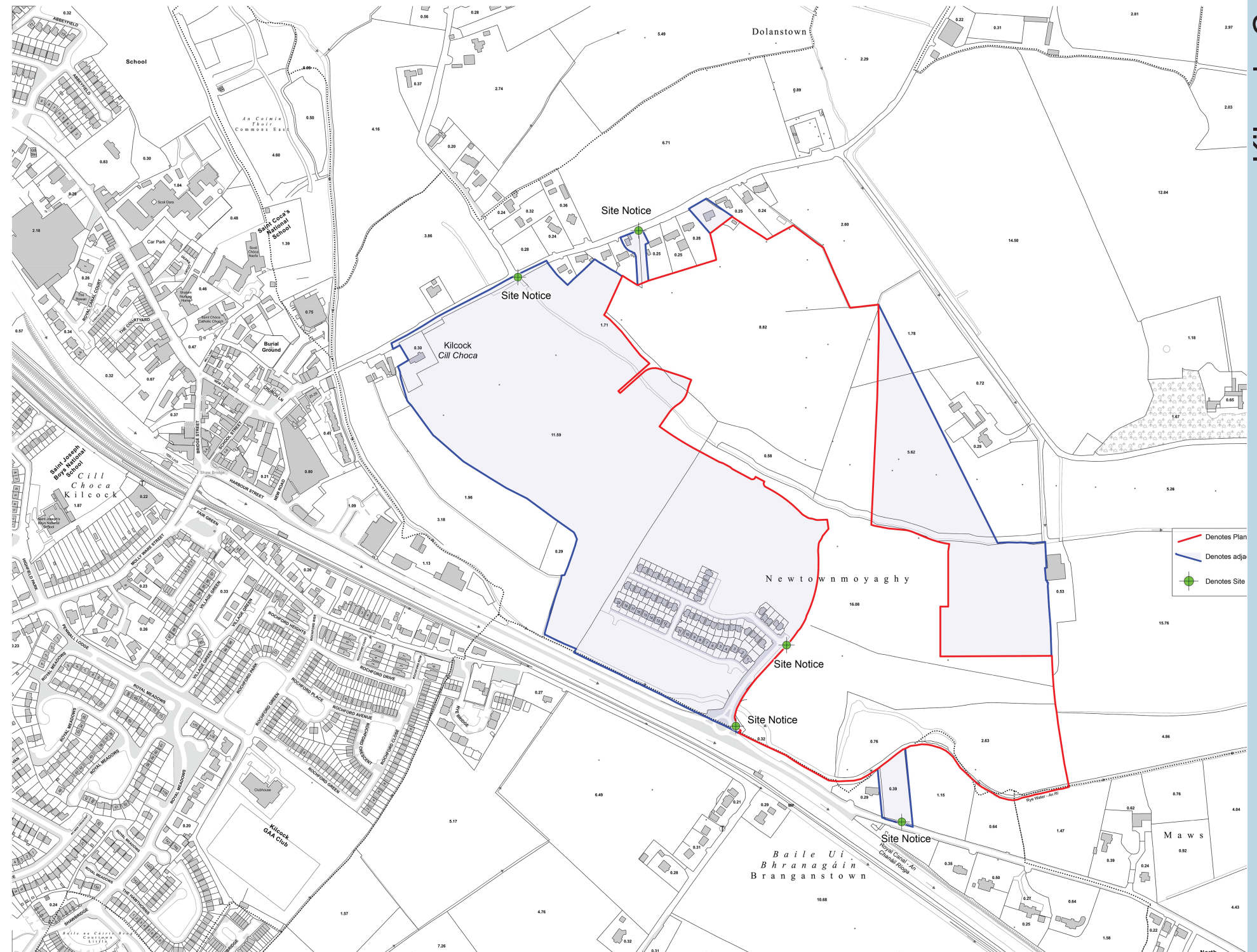
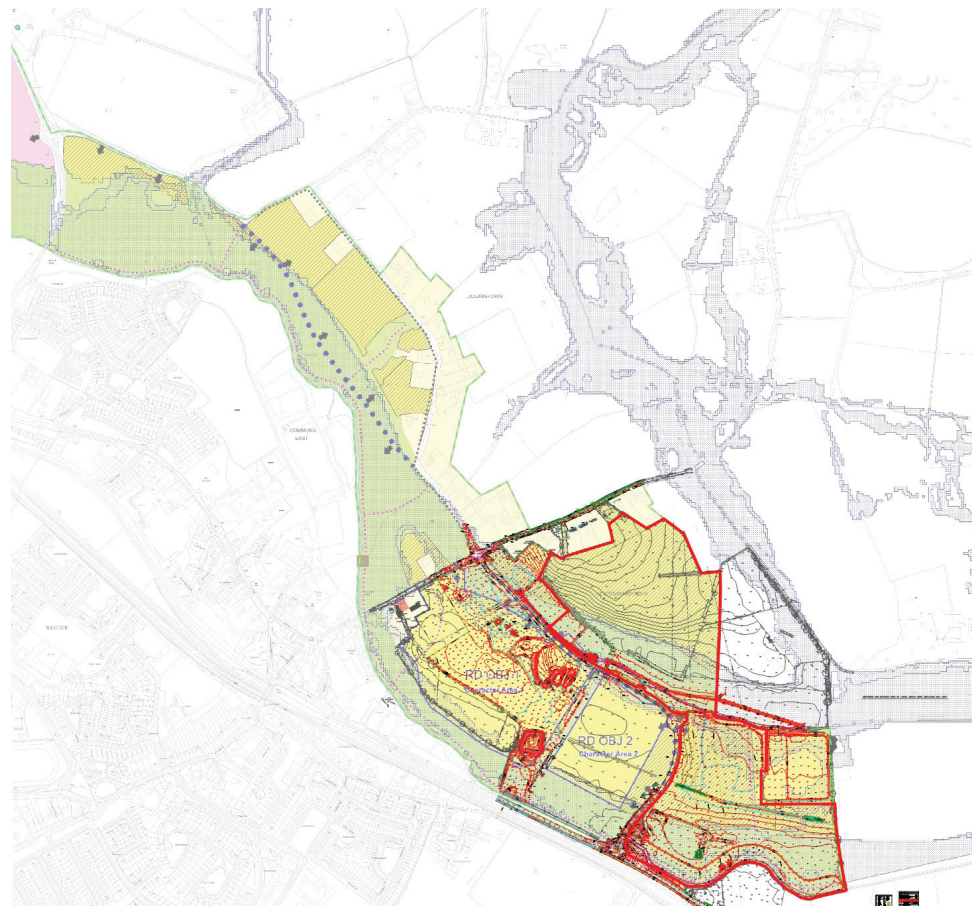
2.1 Location

The site is located in a newly developing area immediately east of the town centre, effectively forming the north east quadrant of the town.

Kilcock is strategically located on the rail line linking Maynooth, Leixlip, and Dublin. This is a knowledge corridor linking the Intel Campus, Maynooth University, and the City. It is linked to both not only by public transport, but by a canal-side and pedestrian green-way.





2.2 Site Description

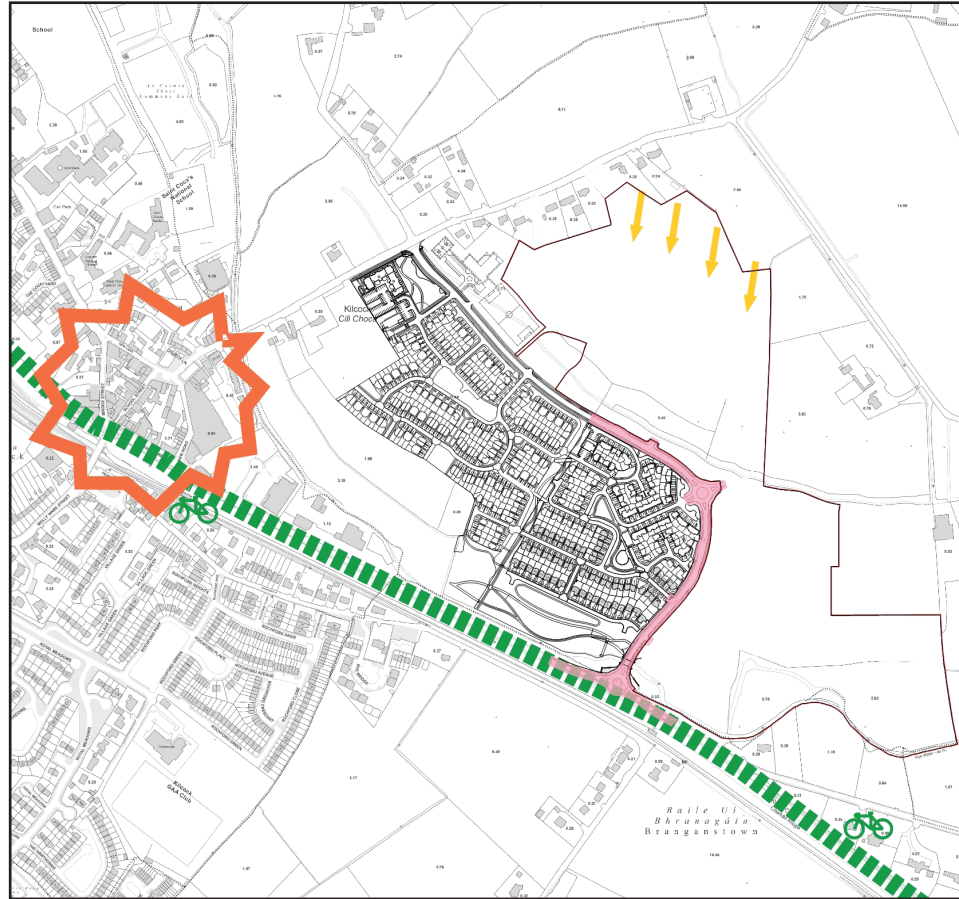
The application site is greenfield and comprises c.24.24Ha. It is divided into two pockets, separated by intended east-west open space. There is housing development both permitted and under construction to the south and west, while an intended GAA grounds and agricultural lands lie to the east. The northern portion gently slopes up to its higher northern part, offering views out, and is separated from the southern site section by a drainage watercourse flowing west to east, while the southern portion is relatively flat, with the intended parkland of the river Rye Water immediately to its south and Royal Canal beyond. The intended open space abutting the southern ends of both portions affords the opportunity to exploit views.






2.3 SWOT Analysis

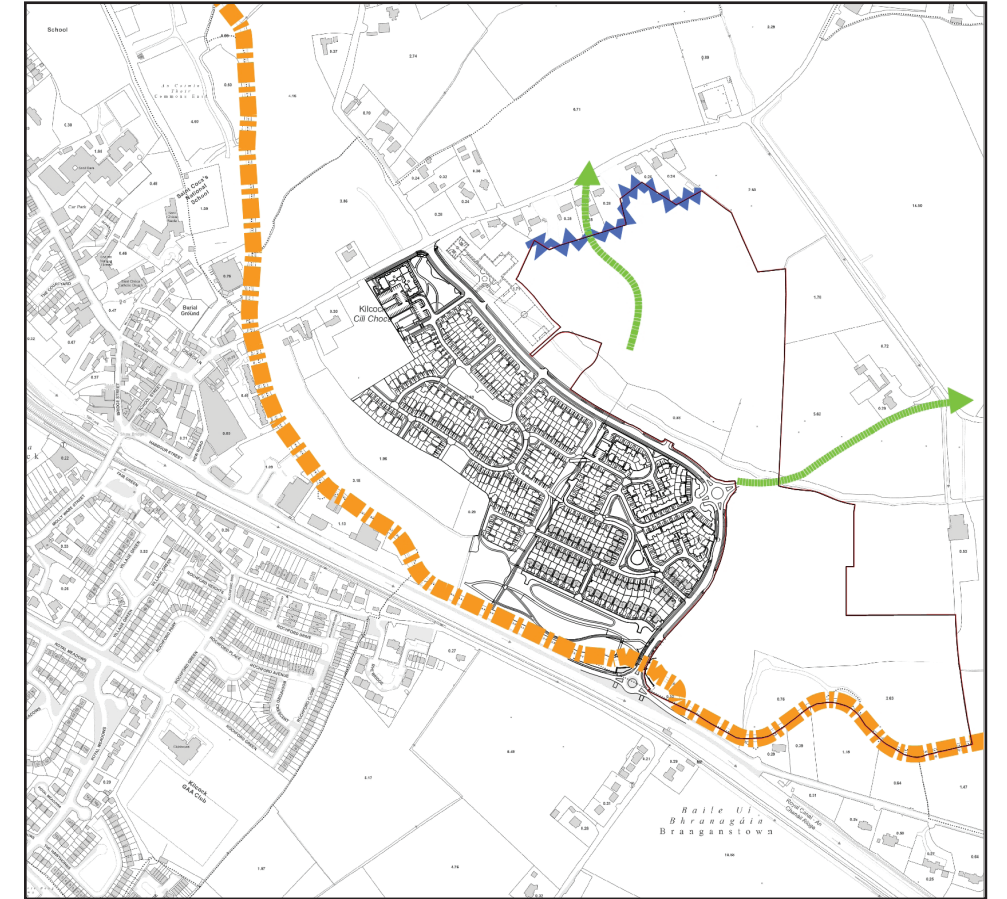
Strengths

-  Proximity to Kilcock Centre
-  Royal Canal & Greenway
-  Slope of Site Creates Views
-  Good Legibility



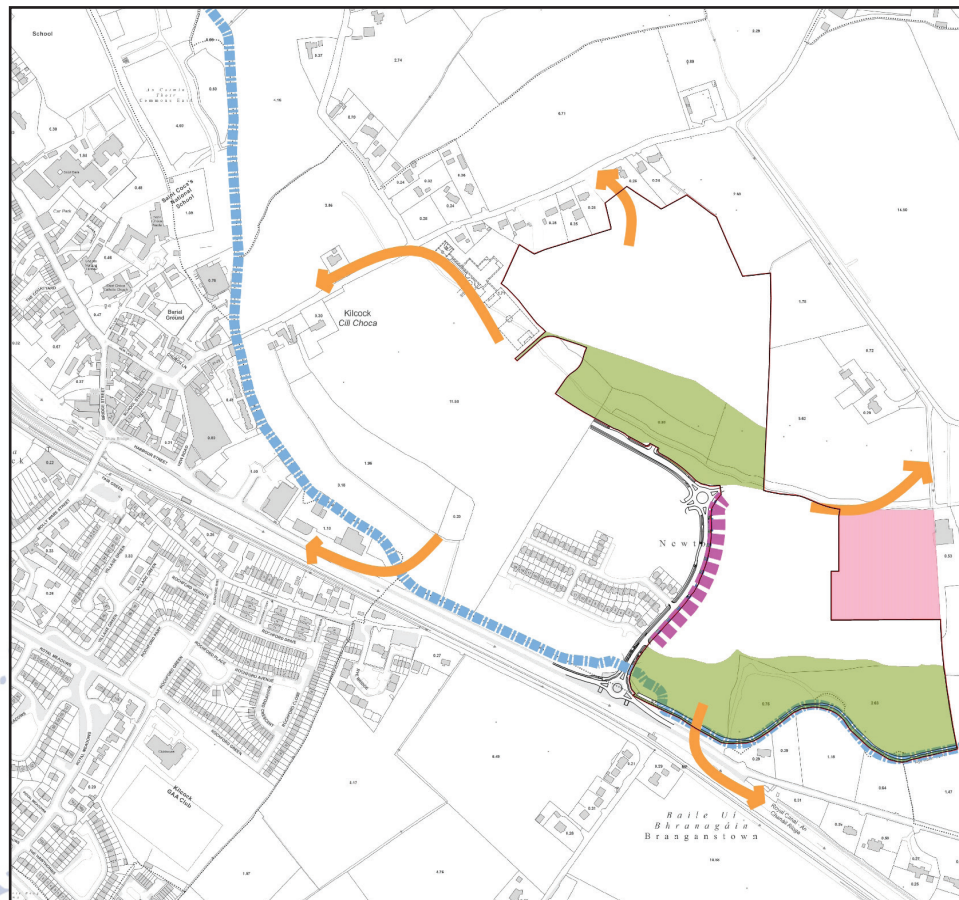
Weaknesses

-  Exposed existing back gardens
-  County Boundary
-  Barriers to Permeability






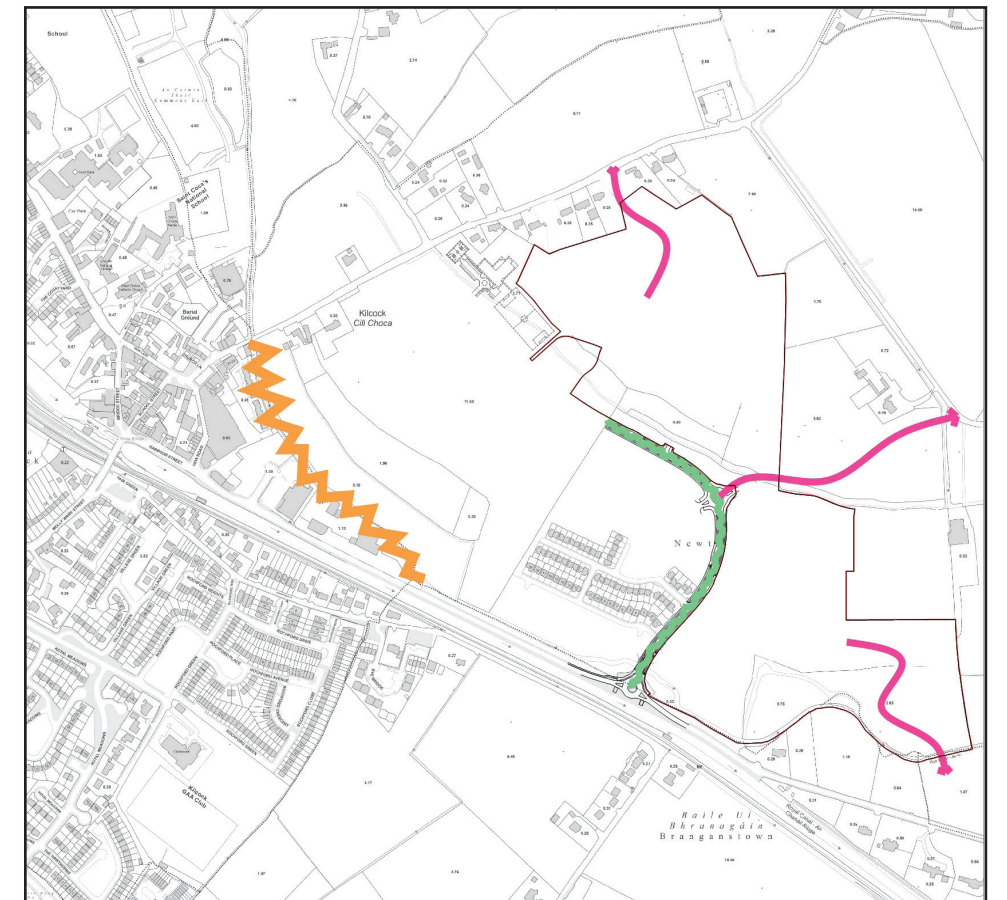
Opportunities

-  Green Space
-  Rye Water River
-  Road Frontage
-  GAA Pitches & Club House
-  Connections



Threats

-  Road Severance
-  Connections to Context
-  Potential isolation from centre



3.0 PROPOSED DEVELOPMENT

3.1 Description

The scheme consists of 575 dwellings comprising 388 houses, 121 duplexes and 66 apartments. The application site area is 24.24Ha containing Community/ Social/ Educational, Open Space and Residential zoned lands. The residential land is in two portions totaling 14.45Ha, excluding any attenuation or landscaping works to the extensive open space zoned lands adjoining.

3.2 Vision

A well-connected and sustainable residential development with its own character and sense of place, forming an integrated part of Kilcock. A development which respects and enhances its setting, making the most of its natural amenity, particularly the riparian and canal corridors and views out.





3.3 Context

01 CONTEXT

How does the development respond to its surroundings?

- The development seems to have evolved naturally as part of its surroundings
- Appropriate increases in density respect the form of buildings and landscape around the site's edges and the amenity enjoyed by neighbouring users
- Form, architecture and landscaping have been informed by the development's place and time
- The development positively contributes to the character and identity of the neighbourhood
- Appropriate responses are made to the nature of specific boundary conditions

The site is located on the eastern side of Kilcock and within the 10 to 15 minute walk band to the train station and town facilities. While the site is served by a new link street, it is very easy to cycle or walk along green-ways leading towards the town.

There are two strong east-west natural linear parks which link back towards the town. These run along the Rye Water, and in parallel to the north, and further stream feeding into the Rye Water. These natural features become the main elements of the public realm and the heart of the neighbourhood. The southern park is in turn paralleled by the Royal Canal, which provides a continuous canal-side walk and cycle path from Kilcock to Maynooth and all the way into Dublin. These parks will be an asset to the town.

Density and form change to suit local conditions - higher density next to open spaces with views out, and lower building heights meshing with the surrounding two storey family housing.

The GAA grounds to the east present two different conditions and responses. The car park and changing rooms are located adjacent to the pitch and the proposed development responds with an apartment block providing passive supervision. To the south there are two training pitches with lighting to allow training in the evening. The response in this instance is to plant trees along the boundary to provide screening, and to back the houses on.

The scale and tone of the development responds to an emerging, recently constructed, neighbourhood immediately to the south. It completes the northern open space, providing a reciprocal edge along its length, and extends the southern park along the Rye Water.



Rye Water



New road junction



New housing on adjacent site



Royal Canal in the centre of Kilcock



Royal Canal in the centre of Kilcock



The Royal Canal Way

3.4 Connections & Movement

02 CONNECTIONS How well connected is the new neighbourhood?

- There are attractive routes in and out for pedestrians and cyclists
- The development is located in or close to a mixed-use centre
- The development's layout makes it easy for a bus to serve the scheme
- The layout links to existing movement routes and the places people will want to get to
- Appropriate density, dependent on location, helps support efficient public transport

The scheme represents organic growth of Kilcock and allows for numerous local connections to the surrounding residential area, school and town. The mixed-use facilities of Kilcock are within a ten minute walk of the site, while the site is next to the Royal Canal Greenway.

While vehicular, pedestrian and cycle access are provided from the recently constructed link road and the existing upper road, facility is made for pedestrian and cycle connections into town.

- Pedestrian/ cycle only connections through the parkland from the northern portion
- Pedestrian/ cycle only connections from the southern portion along the riparian corridor into Kilcock Town, and eastwards to Maynooth University and Intel

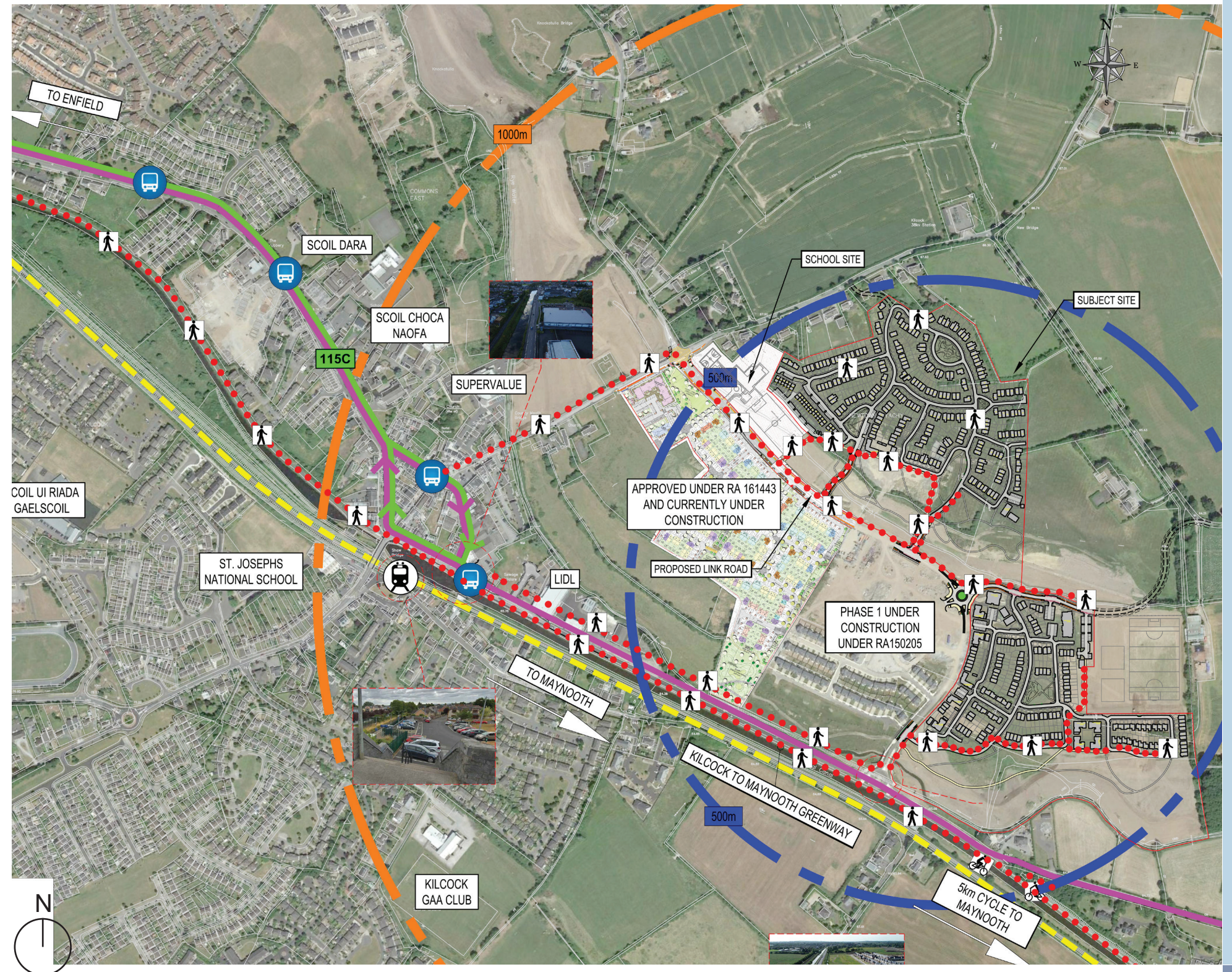
The desire line in the parks is east-west, towards the town centre, station and facilities, and the schools site within the neighbourhood. The vehicular hierarchy has been organised so there is no through east-west traffic movement along the park edges - pedestrian and cycle priority is east-west along joined up home zones and parkside paths.

To the immediate south of the site is the significant resource of the Royal Canal Greenway, the longest greenway in the country. This segregated pedestrian and cycle way alongside the Royal Canal allows for a pleasant 10 minute walk to Kilcock Station and the town's core or a cycle to Maynooth University in under 30 minutes.

The proposal is within 10-15 minute walkband to the rail station, is on the Western Commuter line and is only one stop from the University Town of Maynooth, and one more to the Intel Campus at Leixlip (Louisa Bridge), while rush hour express trains connect Kilcock with Dublin City Centre in 2 or 3 stops. The journey to Dublin Centre is 52 minutes.

The newly built link street is provided with bus stops. The proposed development lies within the 5 minute walk band of these bus stops.

All modes of sustainable commuting are at hand: bus and train links to Dublin, Maynooth and Intel are close by, and a cycle greenway links Kilcock to Maynooth University Town and beyond.



3.5 Inclusivity & Interfaces

03 INCLUSIVITY How easily can people use and access the development?

- New homes meet the aspirations of a range of people and households
- Design and layout enable easy access by all
- There is a range of public, communal and/or private amenity spaces and facilities for children of different ages, parents and the elderly
- Areas defined as public open space that have either been taken in charge or privately managed will be clearly defined, accessible and open to all.
- New buildings present a positive aspect to passers by, avoiding unnecessary physical and visual barriers

A variety of new homes are provided - both houses and apartments, and ranging from 1 bedroom apartments to 4 bedroom houses. The design permits access for all.

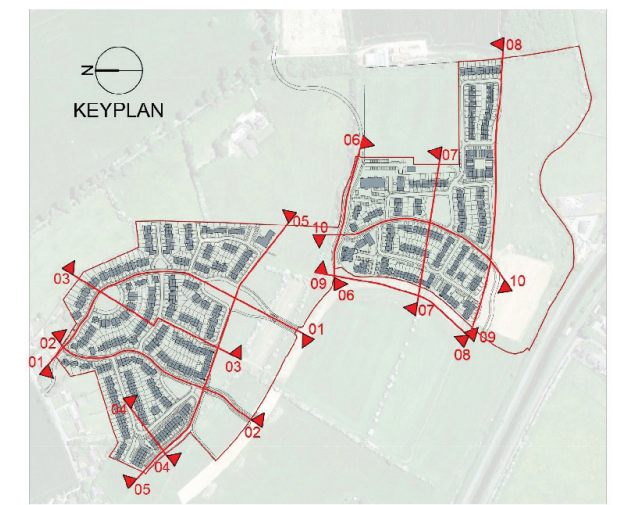
Various character areas will suit different cohorts: apartments closer to the Royal Canal Greenway, family houses close to open spaces. Quiet peripheral streets, houses overlooking and taller apartments with longer views, are all part of the same scheme.

Open spaces are clearly defined and are designed to inform the identity and sense of place of character areas within the scheme. There is provision of facilities for children of different ages, and enjoyable places for older people too, with all paths proposed at gentle gradients.

Kilcock Town centre and its amenities are close by, most of the neighbourhood is within the 10 minute walk-band to the centre.

New buildings present a positive aspect and provide adequate overlooking. A strong edge fronts the parkland, housing overlooks local greens, and individual corner houses look both ways to ensure no blind spots at street corners. A strong edge of dwellings is proposed to front directly onto the built link street providing immediate passive surveillance and active frontages.





3.6 Variety

04 VARIETY How does the development promote a good mix of activities?

- Activities generated by the development contribute to the quality of life in its locality
- Uses that attract the most people are in the most accessible places
- Neighbouring uses and activities are compatible with each other
- Housing types and tenure add to the choice available in the area
- Opportunities have been taken to provide shops, facilities and services that complement those already available in the neighbourhood

The scheme is centred around two significant linear parks which form part of the green lungs of the town, facilitating loop walks and passive recreation for all. The landscape scheme provides a strong sense of place and ecological quality for the enjoyment of all. The parks contain both passive contemplation places and active play spaces. The parks link the town to the GAA facilities where more structured active recreation takes place.

The proximity of the scheme to the centre of Kilcock allows it to avail of and support the amenities of the town. The local supermarket, a local Supervalu, is 500m from the western boundary of the site. It is felt that the new neighbourhood is close enough to town to support it, and any further shopping here could have a corrosive effect on the town centre. A local crèche is proposed.

The proposal responds appropriately to the neighbouring issues:

- Strong edges to the link street thoroughfare
- Strong edges with pedestrian/ cycle priority to the district parks
- Adjoining back gardens of adjacent properties secured with back gardens of the proposals
- Development backs onto agricultural land, closing it off from risk of trespass
- Appropriate potential connection points are provided

The mix of houses and apartments provides a range of typologies and sizes to facilitate difference tenure opportunities. Dwellings range from 1 bedroom apartments to 4 bedroom houses with everything in between.





3.7 Efficiency & Density

05 EFFICIENCY How does the development make appropriate use of resources, including land?

- The proposal looks at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design
- Landscaped areas are designed to provide amenity and biodiversity, protect buildings and spaces from the elements and incorporate sustainable urban drainage systems
- Buildings, gardens and public spaces are laid out to exploit the best solar orientation
- The scheme brings a redundant building or derelict site back into productive use
- Appropriate recycling facilities are provided

Most of the site lies within 1,000m of the town centre and train station. Kilcock, with a population of just over 6,000 in 2016, is now in the 'larger towns' category.

An average of c. 40U/Ha is proposed, graduated according to position. Higher density elements are mainly grouped along the edges of the main spaces and the link street reflecting the spatial hierarchy of the proposal. This is higher than the prevalent densities in Kilcock and provides a more sustainable mix of dwelling types for all stages in life to facilitate a mix of people in the neighbourhood.

Significant infrastructural works already undertaken make this a fully serviced site:

- The link street is an objective of Kilcock town plan and will be completed by the end of 2019. This will benefit the town as a whole
- All of the necessary trunk foul drainage infrastructure for the proposal is complete
- Flood works and detention basins to alleviate potential flooding along the Rye Water has been largely completed and incorporated into green spaces
- Trunk utility connections are all available in the newly completed link street

Two new parks provide amenity and biodiversity and incorporate extensive SUDS features. These areas form the green lung and heart of the neighbourhood.

Higher density clusters along the edges of green spaces face south over the landscape and help maximise the number of households who enjoy it.

The apartment content of the scheme is mainly duplex and small apartment blocks, reflecting the fine grained context of Kilcock. This affords a high percentage of dual aspect units. Larger apartment buildings are generally arranged to provide a mix of east and west facing dwellings.

Housing and apartments will now be built to NZEB standards. The insulation of the building fabric, air tightness and renewable technologies employed in building services all combine to ensure an almost zero energy home.



All houses and apartments are provided with space for three bins to facilitate all kinds of waste: the regular black bin, a green recycling bin, and a brown composting bin.

Solar orientation is favourable with the built edges to the main parks facing south. Most of the apartments are located on or near the park edges, providing accessible, high quality amenity over and above the communal areas. Rear gardens to houses all have good sun availability.

3.8 Distinctiveness

06 DISTINCTIVENESS How do the proposals create a sense of place?

- The place has recognisable features so that people can describe where they live and form an emotional attachment to the place
- The scheme is a positive addition to the identity of the locality
- The layout makes the most of the opportunities presented by existing buildings, landform and ecological features to create a memorable layout
- The proposal successfully exploits views into and out of the site
- There is a discernable focal point to the scheme, or the proposals reinforce the role of an existing centre

The key features that will identify the place at the scale of district are the two large linear parks running on the east-west axis in parallel with the canal, railway and Dublin Road. Layered into this is the new link street which provides a link around the north of the town. This is a new element in the primary structure of Kilcock and will serve to tie the new neighbourhood and its parks into the mindmap of Kilcock residents. It will be a positive addition to Kilcock as it grows as a town. The landscape design of the two parks, with their linear land forms, ecology and strong planting contained by strong urban edges, will create a memorable place. These are the focal points that drive the organisation of the design for the housing areas.

Place at the scale of town

The neighbourhood will comprise three distinct quarters. The first quarter now under construction is contained within the L of the link street from Moyglare junction to the junction on the R148. The second and third quarters, the subject of this application, are north and east respectively of the link street. Each is a quarter in its own right, and each with character areas within.



The neighbourhood will have a sense of coherence by virtue of a similar scale, grain and palette of materials, and also shared bones - the link street and the major parks.

Each quarter is defined by its relationship to the whole. The western quarter under construction and partly complete is closest to the town and has a long frontage onto the Rye Water park.

In the northern and eastern quarters are the subject of this application, the most public outer edge forms a high density 'crust' facing onto either the parks or the link street. Minor streets lead into the quarter and these in turn branch into intimate local streets with a homezone character. The hierarchy is clear.

The scheme relies on recognisable features to form identity - the riparian corridor to the south, the slope to the north providing views south, and individual smaller local open spaces forming the pivot in character areas.



-  Active frontages enclosing public realm
-  Key buildings addressing views



The Northern Quarter

This housing area is organised around a primary loop route with two connections to the link street, which forms the primary boulevard within the neighbourhood. You enter the quarter through the park, reinforcing its place in the landscape. The park is the primary focal point for this area. With each entry the park is drawn into the scheme, forming threshold spaces. The top of the loop allows for a future connection to Moyglare Road, which would ultimately give precedence to the western leg.

The area breaks into distinct character areas, and these are characterised by their place in the route hierarchy, by their relationship with the park, and by the housing typologies and finishes.

The Northern Park and Its Edges

The first character area fronts and faces south over the park. The east-west grain of the park provides the main movement desire line and this is prioritised for pedestrians and cyclists. The two vehicular access routes cross at right angles and then feed back down to the edge.

Two small parks connect to the main park in different ways. The western park is more enclosed and has a visual connection to the larger green space. If the connection to Moyglare Road is formed this will be the busier leg of the loop, and the urban nature of the space reflects this with on-street parking and three storey houses. The eastern space, on the other hand, is more informal and its green area bleeds uninterrupted from the larger green area, effectively a green finger.

The edge is fronted with a mixture of duplex units, houses and apartments. The fringe to the park is a mixture of homezone type quiet streets and linking paths, making a calm and peaceful environment. There is no through vehicular route along the edge. The buildings nonetheless form a strong face to the park with active frontages.

The Quiet Mews Streets

The second character area is a layer of quiet mews streets which connect to the park. They have framed views south to the park and generally connect onto the quiet homezone type park edges mentioned above. They are more informal in character, with a looser mixture of house types using both wide and regular width houses, giving variety to the streetscape. The varying depths of houses, and a relaxed alignment of the front facades, leads to a variety in the roofscape.

The road surfaces are to be different, with a more homezone feel. They are mostly not intended to be truly shared surface, but will be lighter in colour than the primary street, and the footpaths less defined, with a continuous dropped kerb. This will be entered over a cobbled threshold, sometimes combined with a planted chicane. The intent is to ensure that drivers understand they are entering a different environment and adjust accordingly. None of these mews streets are through routes, they are loops and never a short cut.



The Western Edge

This character area seals off the backs of houses on Moyglare Road to the west, and its southern edge faces the park and an area proposed to be the sports field of the school. It is the area closest to town and has a more urban feel.

There is a predominantly three storey edge to the park comprising duplex buildings which avail of a change in levels to provide level access to different floors on each side. These dwellings all have south facing patio gardens or upper terraces.

The rear gardens of existing houses to the west are secured by the rear gardens of the new housing which is two storey and generally over 50m back to back. The north-south street in this instance is more urban and orthogonal reflecting a more urban feel close to the town.

The Top of the Site

The site slopes gently up, and at the top of this south facing slope is the third character area. It is at the head of the loop route and is characterised by a local pocket park and by the loop route itself. This street is more formal with a continual building line and tree planting following a necklace of smaller parks. The layout of houses forming the crescent onto the top pocket park is also formally arranged. At the eastern end the road passes some mature trees on the boundary along which a connection to Moyglare Road could be made in the future. In such an event the eastern leg of the loop would have priority continuing through to make the connection.

The Southern Quarter

This housing area has its own distinct character, but aspects of the design approach reflect that of the northern quarter. The parks are the driver of the layout, and precedence is given to pedestrian and cycle movement along the park edges. The southern park is the primary focal point, while the pocket park within provides local orientation and sense of place.

This quarter firstly has a frontage onto the Link Street, although vehicular access is from within. Vehicular access is by a primary route which connects from the south park to the north park. You enter this quarter through the south park, again reinforcing its place in the landscape, leading into a central space, which provides sense of place for the middle, and the route emerges with a framed view of the north park.

The area breaks into distinct character areas, and again these are characterised by their place in the route hierarchy, by their relationship with the park and Link Street, and by the housing typologies and finishes.

The Southern Park and It's Edges

The first character area fronts and faces south over the park. The east-west grain of the park provides the main movement desire line and this is prioritised for pedestrians and cyclists. The vehicular access route enters through the park as shown in Kilcock town plan, and the crosses at right angles into the scheme.

The edge is fronted with a mixture of duplex units and houses. The fringe to the park is a mixture of homezone type quiet streets and linking paths, making it calm and peaceful. Again, there is no through vehicular route along the edge. The buildings nonetheless form a strong face to the park, with active frontages. Three storey duplex buildings and houses frame the entrance area, and a balance of the park frontage is edged in a mix of quiet homezone streets with houses, and a quadrangle of duplex buildings, facing directly over the park. At the eastern side two parallel streets face the park and GAA ground respectively.

A number of minor streets from within the housing area connect out onto the homezones at the park edge, across homezones, affording a safe and calmed pedestrian and cycle route into the park.

The Link Street and the Mews Area behind

This is the second character area, forming the western fringe of the quarter.

The link street has to be a positive element, uniting the neighbourhood and not a hostile void dividing it. The dominant feature on the east-west leg is the northern park. The north-south leg is gently curved so the new edge to the Southern Quarter is the visually dominant side of the road. A strong edge will provide a sense of urban enclosure, street and place.



A strong frontage with an active edge is required. A parallel access street was deemed unacceptably removed from the thoroughfare, and a serial vehicular accesses were prohibited. The solution is to place a strong line of buildings close to the back of the footpath. A mixture of three storey houses and duplex blocks with front doors at the back of pavement ensures an active edge. Vehicular access is from a mews behind.

There is a looped network of calmed mews streets behind, which provide access and parking. Entrance thresholds reinforce a sense of changed environment and the colour of the road finish within is paler,

with a continual drop kerb to the footpaths. Small entrance courts accommodate parking for the duplex buildings, which form corners, addressing both the link street and the court. Houses on the link street have parking on-curtilege, immediately to the rear. While the front door is to the main street, threshold detailing of their rear entrances in the garden wall use the similar language as hall doors elsewhere in the mews. The mews street, in common with other areas, is open to the park to the south, with access and framed views of greenery. This area also gives access to the north east corner, where a four storey apartment block forms a vista closer at the roundabout.

The Middle with its Green Spine and Park

While the first two character areas are informed by edge conditions, the third character area is the heart within the quarter.

The main access route forms a green spine, linking from the south park to the north park, with framed parkland views at each end. This street gently curves slowly, unfolding views as it progresses. The outer side of the curve is the visually dominant side and it has a strong rhythm of trees reinforcing its parkland connections at each end. Approximately half way along this street there is a pocket park, which marks the turn to the eastern end of the quarter. Towards the northern end there is a triangular space with space for a specimen large tree located beside the crèche.

The character of the middle quarter is generally softer and two storey, although three storey houses interspersed along the green spine reinforce its primacy in the route hierarchy. Housing on the main street and around the green is more formal, with regular building lines, which contrast with the more informal housing layouts and use of interspersed wide frontage houses in the calmed mews or homezone style areas.

An exception is in the north-east corner, where a four storey apartment block faces out over the GAA pitches and entrance area/ parking. This provides passive overlooking of the carpark area and views beyond to the playing fields. The long axis of this block is north/south, thus providing for east and west facing apartments. Parking is divided into two separately accessed courts, to control its scale and impact. A west facing communal garden is located beside the main entrance to the building.

The balance of this edge facing the GAA looks onto training areas close by, which can tend to become all-weather surfaces with lighting to allow training in the evening. In this instance the houses back on and a screen of trees are to be planted on the GAA side, to shield the lights and activity from view.



3.9 Layout

07 LAYOUT

How does the proposal create people friendly streets and spaces?

- Layout aligns routes with desire lines to create a permeable interconnected series of routes that are easy and logical to navigate around.
- The layout focuses activity on the streets by creating active frontages with front doors directly serving the street
- The streets are designed as places instead of roads for cars, helping to create a hierarchy of space with less busy routes having surfaces shared by pedestrians, cyclists and drivers
- Traffic speeds are controlled by design and layout rather than by speed humps
- Block layout places some public spaces in front of building lines as squares or greens, and some semi private space to the back as communal courts

The main organising route into and through the neighbourhood is the newly constructed link street, which has a semi-arterial function, insofar as it will move traffic from other parts of Kilcock and environs. Within the application site there are two edge conditions; one to the north park, which will be a landmark on the route, the other being the western street edge of the southern quarter, already discussed above. This application will have a positive effect on the road, both by providing activity in the park and active building frontages to the built up areas. Both will enhance the nature of the road and give a sense of pause that the road is a 'somewhere' of itself, and not just a channel through.

Within each character area there is a principal local street that acts as the main organising element of the vehicular movement, and these have been arranged to give precedence to the east-west pedestrian and cycle movement along the linear parks.

The principal local street in the northern quarter is a loop with an eastern leg. The former is aligned to connect onwards to R125 Road, should that opportunity arise. This gives precedence to that side as it is the shorter route, and being closer to town it has a more urban feel, with its transition space well enclosed with two and three storey edges. The transition space on the eastern leg, in contrast, flows seamlessly from main park and tree-lined route and follows a gently curving necklace of local parks, to eventually close the loop in the north-eastern corner.

A similar approach applies to the principal local street in the southern quarter, which links the two parkside entry points, in a green tree planted spine, with a central open space giving orientation.

There is a very clear street hierarchy - graduated from busy to calm. Child friendly mews lanes, local greens well overlooked by surrounding housing, and apartments overlooking parklands all offer appropriate environments according to position in the scheme.

Minor local roads form loops of quiet, truly local, streets within the character areas. As described in the various character areas, these have threshold entry points and a change in road surface/ colour and with a continual drop kerb to give a calmed, homezone feel, without actually using a shared surface. Each street will have an intrinsic individuality, due to its relationship to and particular views of, the park, its geometry, the varied building lines and the mix of wide and normal width house types.

Traffic speeds are controlled by layout and horizontal deflection, buildings are close to the street in places, and the variety of buildings and streetscape provide interest, security and sense of place.

The scheme is fine grained, with the predominant apartment type being various versions of own door duplexes. This allows a high degree of active frontages. Duplex units have been designed to make corners and are always dual aspect, with front doors generally positioned on the same side as the rear garden boundary, to eliminate any blind spots.

While the vehicular hierarchy decreases as the routes disperse into the mews streets, pedestrian and cycle permeability and desire lines increase. The quiet streets generally culminate at one end or the other, at one of the big parks, and movement to and along the park is all on quiet streets or footpaths. This allows the park to mesh into the quiet street and draw into the scheme.

There are also pocket parks giving local identity, as previously described in the character areas. Duplex blocks are often L-shaped and contain shared communal green space within.



3.10 Public Realm

08 PUBLIC REALM How safe, secure and enjoyable are the public areas?

- All public open space is overlooked by surrounding homes so that this amenity is owned by the residents and safe to use
- The public realm is considered as a usable integrated element in the design of the development
- Children's play areas are sited where they will be overlooked, safe and contribute to the amenities of the neighborhood
- There is a clear definition between public, semi private, and private space
- Roads and parking areas are considered as an integral landscaped element in the design of the public realm.

All the public open space is overlooked by dwellings and forms an integral part of local housing character. The main two open spaces are both landmarks at the scale of district, the northern as an edge to the Link Street, the southern as a continuous linear park along the Rye Water river.

A combination of active frontages and quiet local homezones are the predominant edge condition, ensuring maximum interaction between the park and the dwellings, one that is pedestrian and cycle friendly and not traffic dominated.

Please refer to Landscape Architects' report for a detailed description of the parks, the provision of play spaces and layout generally. Both parks encompass new wetland areas, tree planting and grass areas, all providing for an improved and more diverse ecology. A net gain for pollinator friendly species and biodiversity are important elements in the proposal. The scale of the larger spaces are broken down to accommodate both active areas and tranquil, contemplative space.

The public realm hierarchy for open spaces, for streets, for heights and mix of dwellings clearly overlay and are mutually supportive.

Streets are places - whether routes, edging spaces or peripheral.

Open spaces are all overlooked to enhance local passive security and local 'ownership'. The organisation of open spaces defines character and place within the scheme.

There is a clear definition of open space as communal and distinct from private. Duplex buildings in many cases form small courts behind the building line, often in the same zone as adjacent house gardens.





3.11 Adaptability

09 ADAPTABILITY How will the buildings cope with change?

- Designs exploit good practice lessons, such as the knowledge that certain house types are proven to be ideal for adaptation
- The homes are energy-efficient and equipped for challenges anticipated from a changing climate
- Homes can be extended without ruining the character of the types, layout and outdoor space
- The structure of the home and its loose fit design allows for adaptation and subdivision, such as the creation of an annexe or small office
- Space in the roof or garage can be easily converted into living accommodation

There are opportunities for houses to extend into the rear garden for both the narrow and wide fronted house types. In most house types space in the roof can be converted into living accommodation.

The neighbourhood provides a variety of typologies suitable for all stages of life, making it easier to move home within one's community as circumstances change.

Ease of Adaptability - Main living room can be converted to a downstairs bedroom and utility/wc into a Part M Bathroom as necessary



3.12 Privacy & Amenity

10 PRIVACY AND AMENITY How does the scheme provide a decent standard of amenity?

- Each home has access to an area of useable private outdoor space
- The design maximises the number of homes enjoying dual aspect
- Homes are designed to prevent sound transmission by appropriate acoustic insulation or layout
- Windows are sited to avoid views into the home from other houses or the street and adequate privacy is affordable to ground floor units.
- The homes are designed to provide adequate storage including space within the home for the sorting and storage of recyclables.

Each house is served by an area of usable private outdoor space, that meets development plan standards, most commonly with a sunny aspect.

Apartments have integral balconies, designed to overlook the public parks in two directions, at nodes along the park edge. All are sized to meet or exceed Section 28 guideline sizes.

3.13 Parking Cars & Bicycles

11 PARKING How will the parking be secure and attractive?

- Appropriate car parking is on-street or within easy reach of the home's front door.
- Parked cars are overlooked by houses, pedestrians and traffic, or stored securely, with a choice of parking appropriate to the situation.
- Parking is provided communally to maximise efficiency and accommodate visitors without the need to provide additional dedicated spaces
- Materials used for parking areas are of similar quality to the rest of the development
- Adequate secure facilities are provided for bicycle storage

Car parking is provided generally within the curtilage of the house it serves, at a rate of two spaces per house, combined with trees/ shrubs, to provide an attractive streetscape.

Communal car parking is also provided in front of the dwellings. Parking is broken up with tree planting.

Variety in house frontage width, and use of homezones, provide variety in the appearance of parking. Apartment parking is overground, clearly overlooked, and integrated into the landscape.

Each multi-unit building has secure, sheltered, parking for long-term bicycle parking, while short-term stands for visitors are provided near the main doors.



3.14 Detailed Design

12 DETAILED DESIGN

How well thought through is the building and landscape design?

- The materials and external design make a positive contribution to the locality
- The landscape design facilitates the use of the public spaces from the outset
- Design of the buildings and public space will facilitate easy and regular maintenance
- Open car parking areas are considered as an integral element within the public realm design and are treated accordingly
- Care has been taken over the siting of flues, vents and bin stores

Existing landscape features informed the hierarchy of the scheme and its design. The slope to the north provides the edge to the parkland, while the river valley below, with the GAA grounds, provides a setting for apartments.

Local parks reinforce local identity, with legible progression and views through to the wider parkland beyond, reinforcing structure and connectivity.

The detailed house type and apartment block drawings indicate proposed elevational materials and finishes.

The palette of building materials will have enough consistency to ensure it all appears as one neighbourhood, and enough local variation to give distinction to reinforce character. It is not intended to appear like several conjoined housing estates. Successful character differentiation will also rely on position, existing features, the type of road and its place in the hierarchy, and the local detailing of the open spaces defining each place.

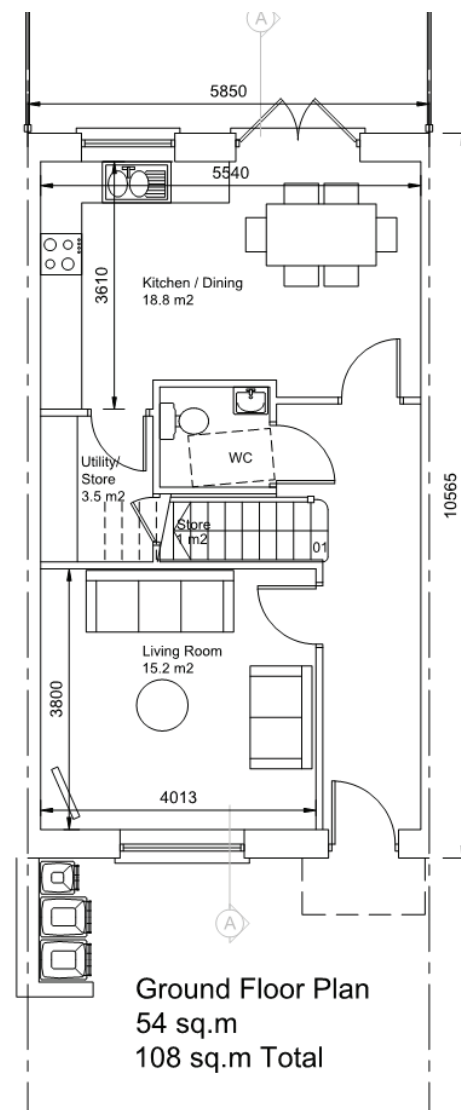


4.0 BUILDING DESIGN

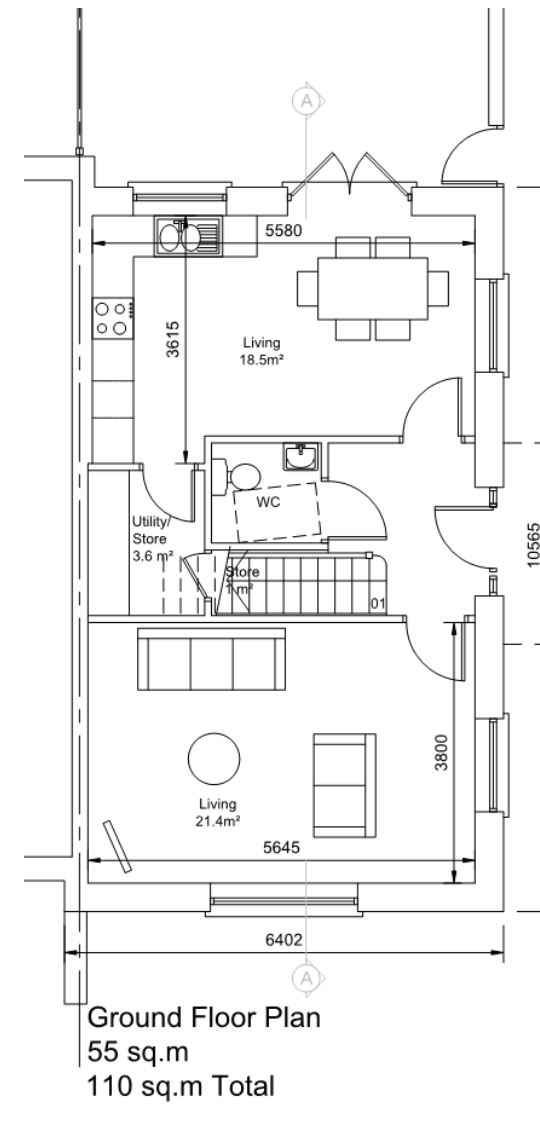
4.1 House Types

The distinctiveness of the Newtownmoyaghy development is its consistent design approach and palette of materials. Brick houses with discrete render parts make recognisable traditional streetscapes, while varying use of elements such as double-height bays, single height bays and render/brick ratios allows variety in the street composition while retaining its familiarity. Corners are turned with double fronted houses and a variety of canopies evoke the familiar language of traditional houses.

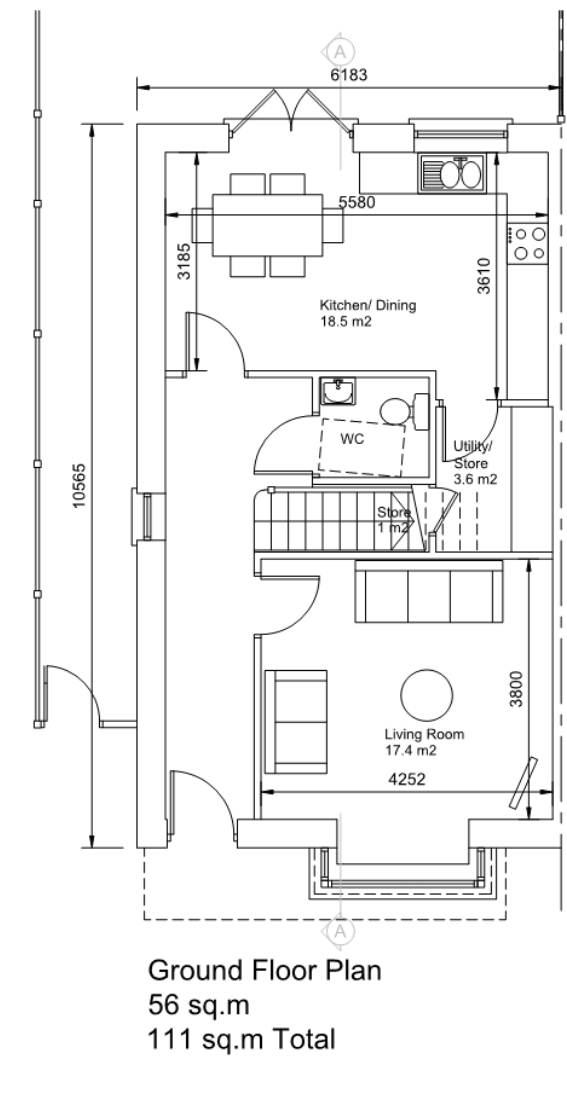
There are 20 different housetypes proposed which range from 2 to 4-bed and from 2 to 3-storey, in detached, semi-detached and terraced form. House designs include narrow-fronted units, double-fronted units, tall units, short units, L-shaped units and corner units with two street faces.



House type B



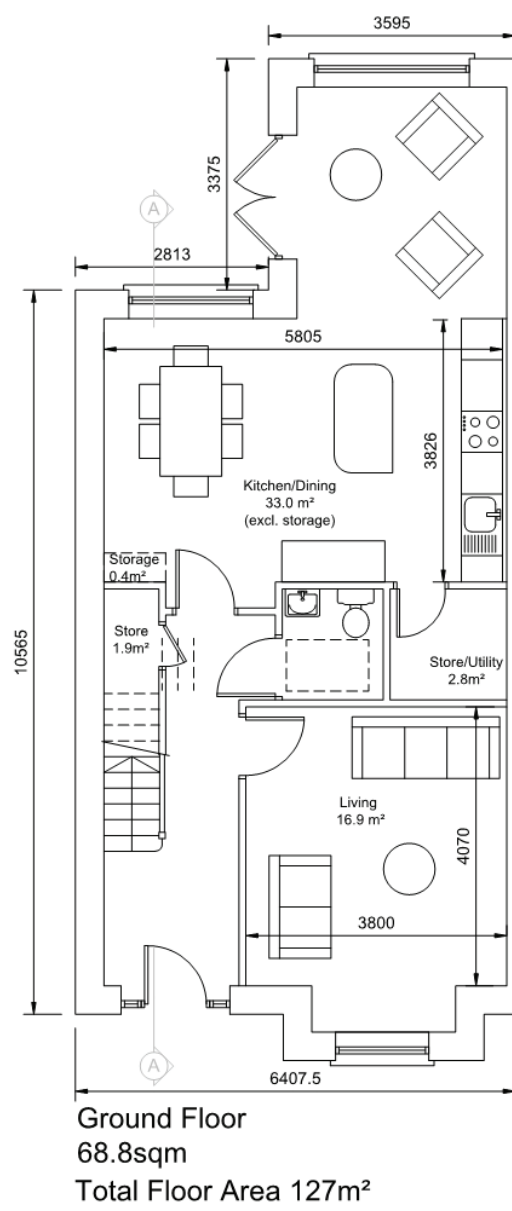
House type B2



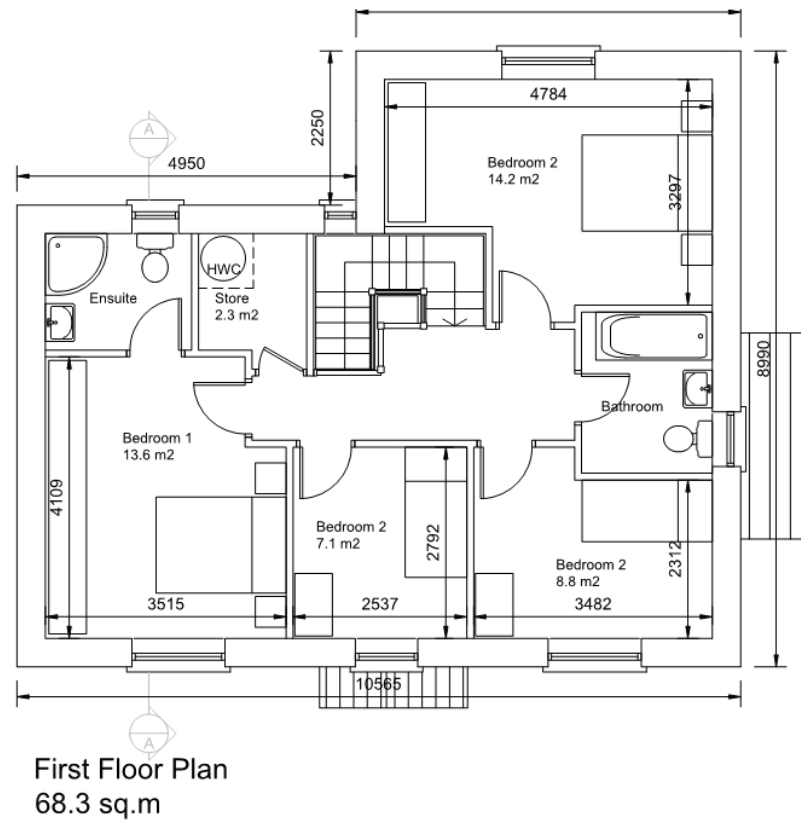
House type B2



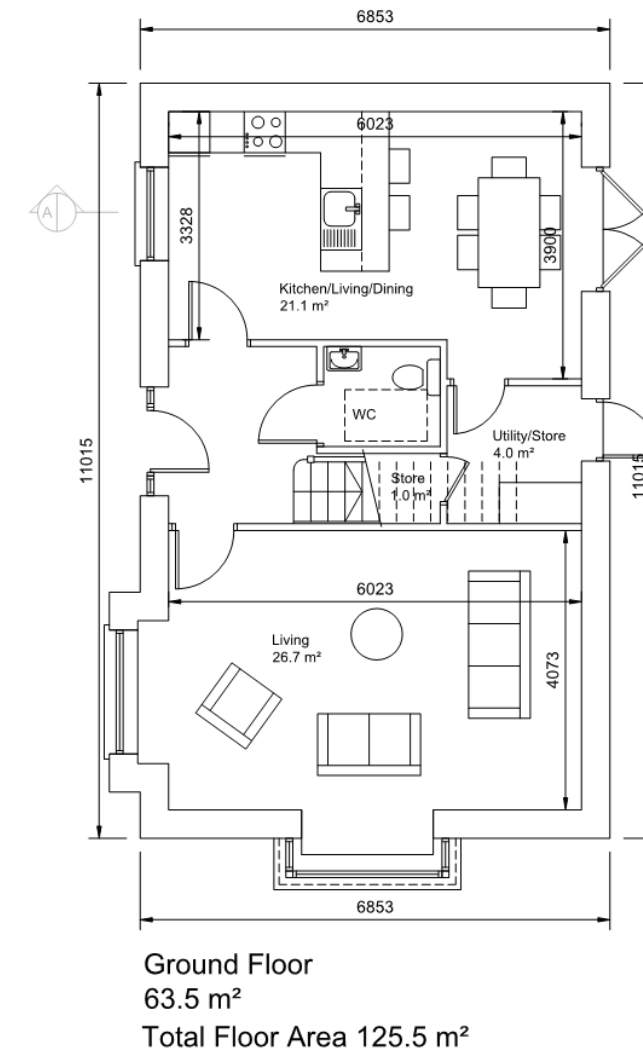
Contextual Elevation of House types



House type G2



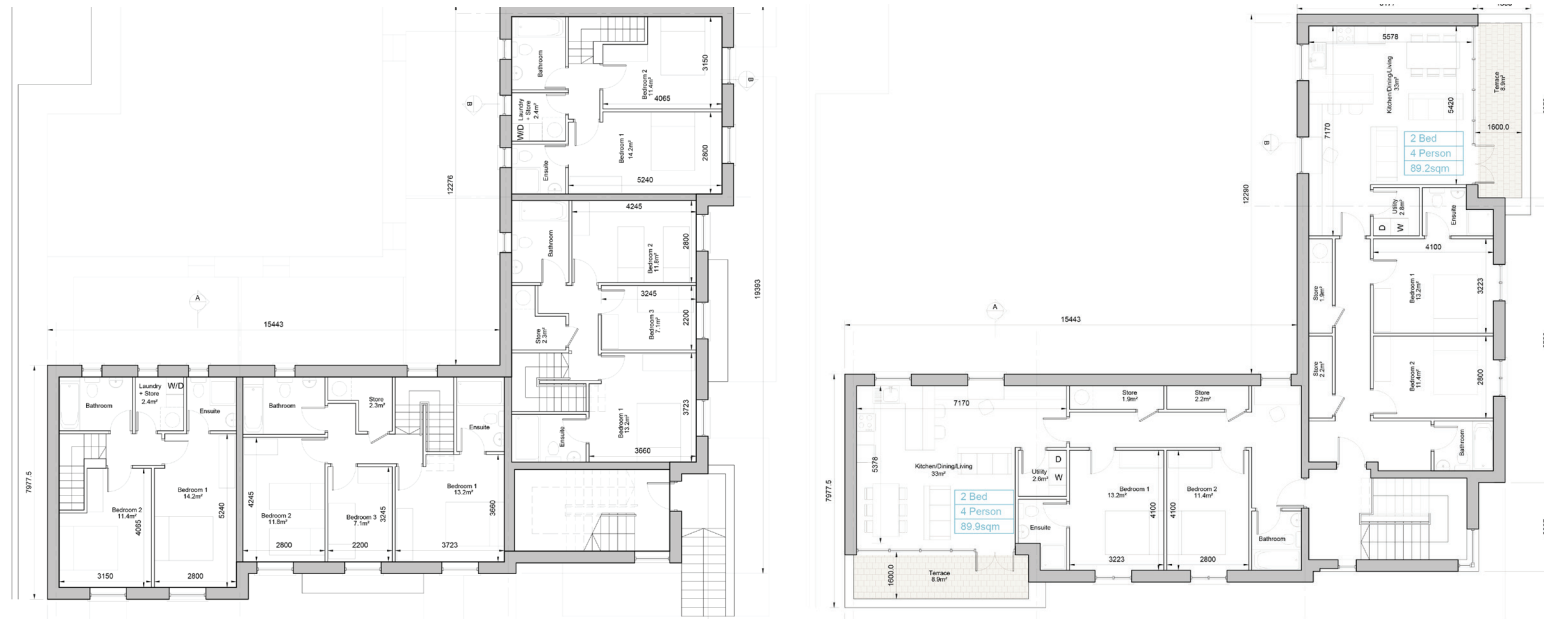
House type F



House type E



4.2 Duplex Design



First floor plan

Second floor plan



Ground floor plan

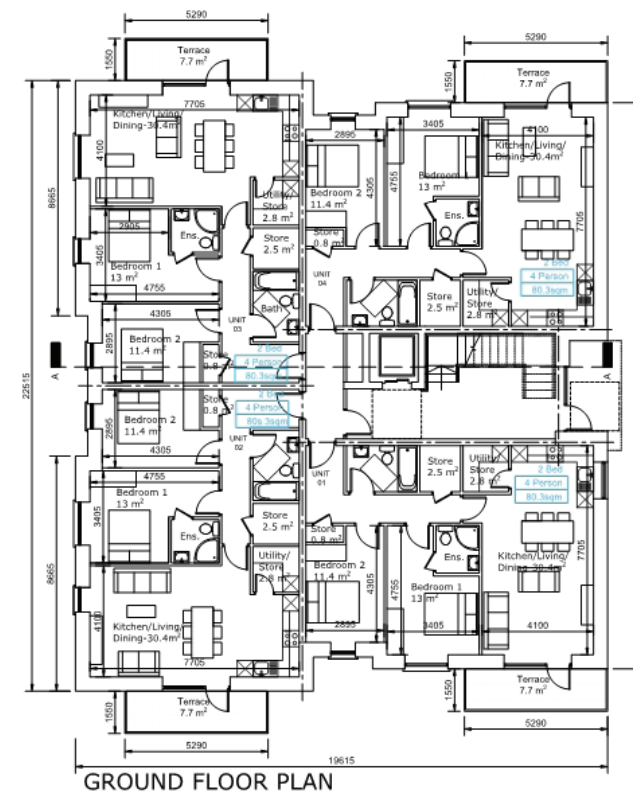
4.3 Apartment Design

The apartment design has been informed by the distinct nature of the river parkland and royal canal nearby. A variety of brick reflects that of the houses while full height glazing and glazed or railing balustrades make use of the light and views available.

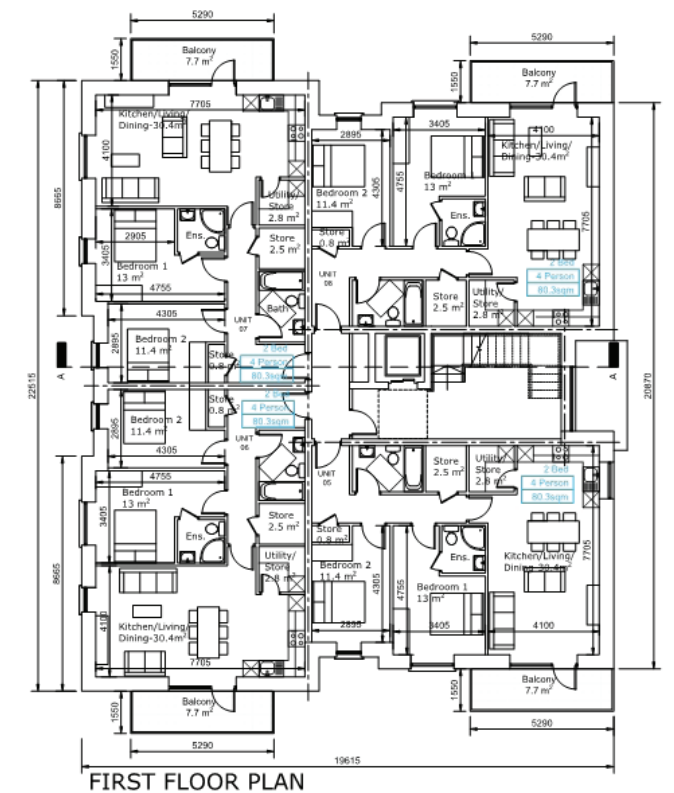
Apartments closer to houses are closer to their scale, with complementary pitched roofs, gable fronts and render/brick treatment.



WEST ELEVATION



GROUND FLOOR PLAN



FIRST FLOOR PLAN

5.0 DEVELOPMENT STANDARDS

5.1 DMURS

Existing Road Network

The new distributor road is currently under construction and will feed this development. This road is wide, with off road cycle lanes and footpaths along its length.

The proposed development is to be compliant with the recommendations set out in the Design Manual for Urban Roads and Streets (DMURS), the stated objective of which is to achieve better street design in urban areas.

Achieving better street design in urban areas will encourage more people to choose to walk, cycle or use public transport by making the experience safer and more pleasant. It will lower traffic speeds, reduce unnecessary car use and create a built environment that promotes healthy lifestyles and responds more sympathetically to the distinctive nature of individual communities and places. The proposed development is intended to deliver a high quality environment which complies with the recommendations of DMURS.

Creating a Sense of Place

Four characteristics represent the basic measures to create people-friendly streets that facilitate more sustainable neighbourhoods.

1. Connectivity

The creation of vibrant and active places requires pedestrian activity. This requires walkable street networks that can be easily navigated and are well connected. The proposed development gives pedestrians and cyclists precedence over other modes of transport, through additional pedestrian and cycle links that ensure active modes of travel are always the most direct option.

Each block of housing has footpaths on all sides, with dropped kerbs provided at junctions. Footpaths through the extensive open space and connections to the Royal Canal Way ensure that walking into Kilcock centre will be an attractive and comfortable option.

The development is also well connected to the surrounding road network with potential future links safe-guarded where relevant.

2. Enclosure

A sense of enclosure spatially defines streets and creates a more intimate and supervised environment. A sense of enclosure is achieved by orientating buildings towards the street and placing them along its edge.

The use of street trees can also enhance the feeling of enclosure.

The proposed development has been designed so residential units are overlooking streets and public open spaces which provides passive surveillance. Landscaping and tree planting are provided along the roads/streets which assists in providing a sense of enclosure.

3. Active Edge

Active frontage enlivens the edge of the street creating a more interesting and engaging environment and ensures the street is overlooked by generating pedestrian activity as people come and go from buildings.

Entrances to apartment blocks and duplexes are provided directly from the street. Terraces of houses also provide continuous frontage.

4. Pedestrian Activity/Facilities

The sense of intimacy, interest and overlooking that is created by a street that is enclosed and lined with active frontages enhances a pedestrian's feeling of security and well-being.

Good pedestrian facilities (such as wide footpaths and well designed crossings) also makes walking a more convenient and pleasurable experience that will further encourage pedestrian activity.

As outlined above, the proposed development has been designed to provide excellent pedestrian and cycle connectivity. All urban blocks have significant active frontage, creating activity and providing surveillance to enhance pedestrians' feeling of safety and wellbeing.

The proposed development has been designed to reduce traffic speeds with long straight sections of road, where possible, being avoided. Road junctions incorporate raised tables which improve pedestrian crossing facilities, particularly for disabled users and people pushing prams/buggies, and serve as an additional traffic calming measure.

Key Design Principals

DMURS sets out four core design principles which designers must consider in the design of roads and streets.

1. Connected Networks

The proposed development has been carefully designed to ensure that the focus on connectivity is centred on pedestrians and cyclists, which will promote walking and cycling by making them a more attractive option than the private car.

2. Multi-Functional Streets

The proposed development includes a mix of houses, duplexes and apartments. Provision has been made for a wide range of residents. A crèche and GAA changing rooms will further diversify the range of users and activities on the streets within the proposals.

3. Pedestrian Focus

The design of the scheme has placed a particular focus on the pedestrian. Connectivity throughout the scheme is heavily weighted towards the pedestrian and away from the private car. The streetscape has been designed to provide a sense of enclosure and to be active with good passive surveillance in order to enhance pedestrians' sense of safety and wellbeing.

The street design incorporates well thought out pedestrian facilities such as generous footpaths, pedestrian crossings and raised tables.

4. Multi-Disciplinary Approach

The design of the proposed scheme has been developed through the design team working closely together.

DMURS Summary

The site is located in Kilcock, which is defined as per DMURS Section 3.2. 2 "Place Context" as a neighbourhood which is intensively developed with medium to higher density housing and contains a broad mix of uses.

An active frontage is achieved with frequent entrances and openings that ensure the street is overlooked and generate pedestrian activity as people come and go from buildings.

The roads throughout the development have regular junctions and pedestrian crossings in accordance with this recommendation.

Both perpendicular and parallel on-street parking spaces are incorporated at various locations throughout the development. On-street parking separates pedestrians from the vehicle carriageway and, as per DMURS Section 4.4.9, can calm traffic by increasing driver caution, contribute to pedestrian comfort by providing a buffer between the vehicular carriageway and foot/cycle path and provide good levels of passive security.

Roads through the development have been designed with a gentle horizontal curvature, which helps to calm traffic without impeding on safe sight lines or unduly increasing walking distances for pedestrians, and is in accordance with alignment and curvature recommendations set out in DMURS Section 4.4.6.

The public areas fronting and within the proposed development have been designed by the multi-disciplinary design team to accommodate pedestrians and cyclists in accordance with the appropriate principles and guidelines set out the Design Manual for Urban Roads and Streets.

It is considered that the proposed development is fully compliant with the connectivity objectives of DMURS.

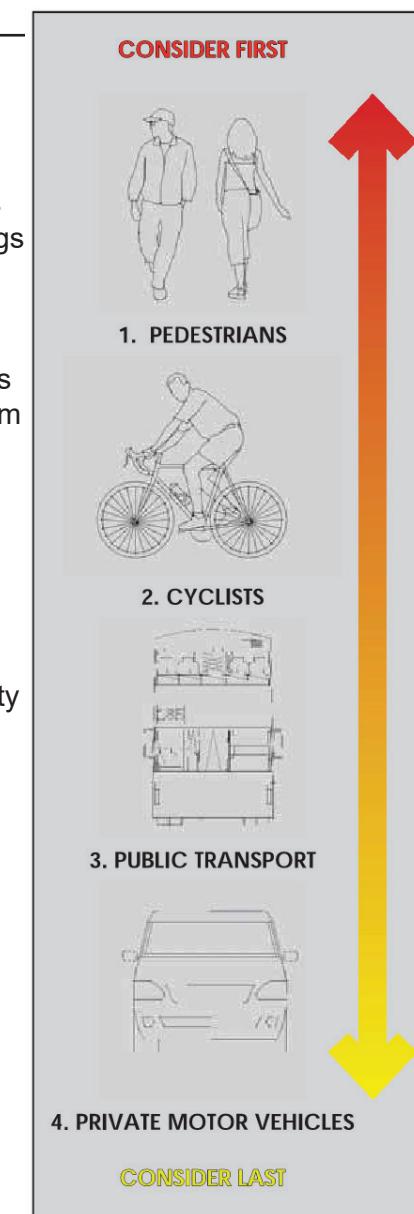


Figure 2.21: User hierarchy that promotes and prioritises sustainable forms of transportation

5.4 Childcare Facilities

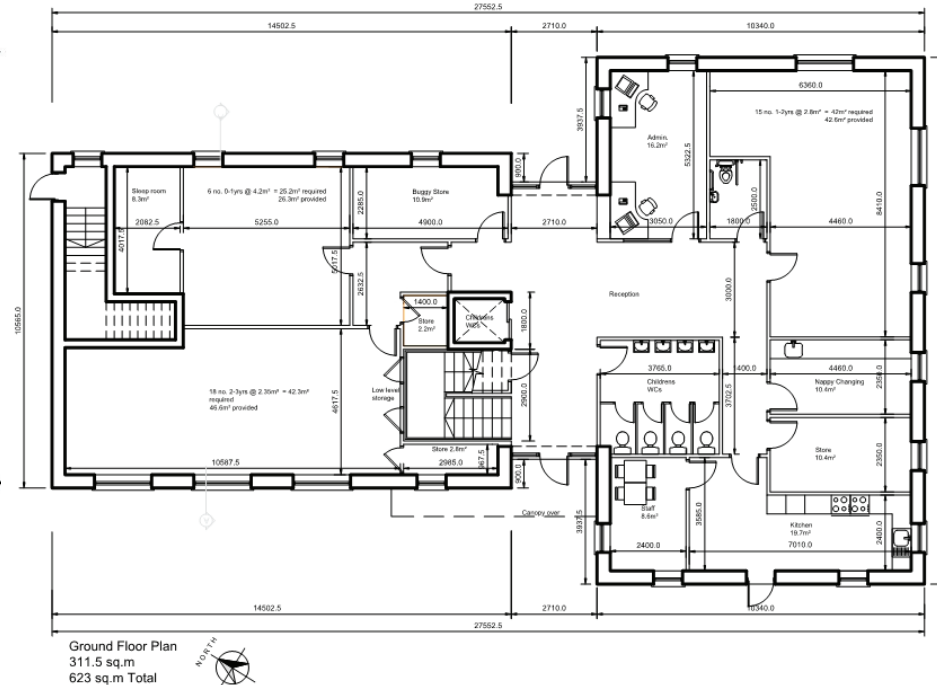
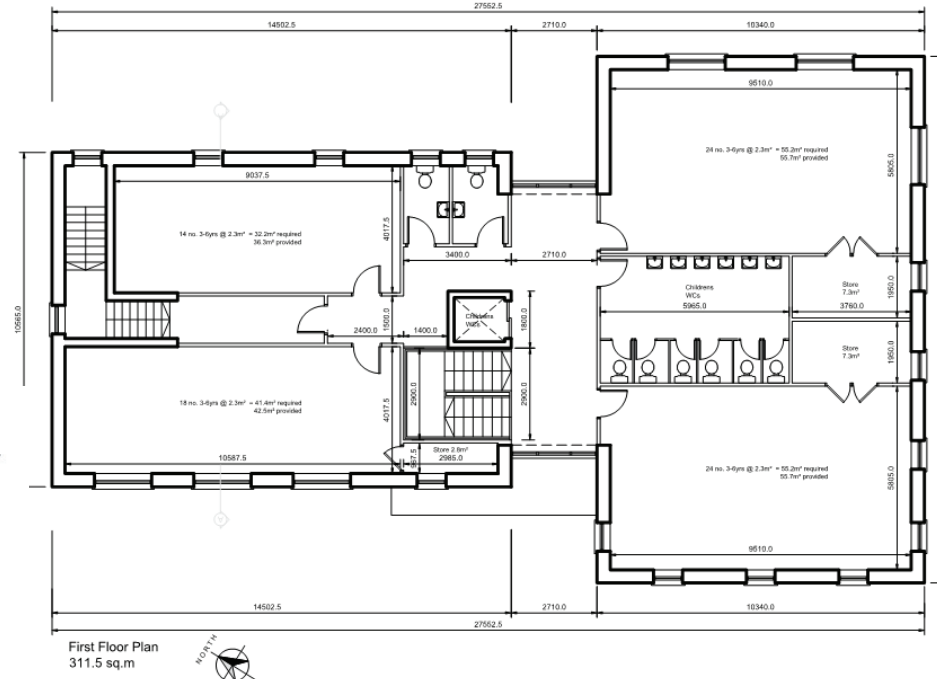
A crèche is proposed to serve the development, centrally located between the northern and southern portions and the adjoining housing currently under construction. The number of children to be served is derived from discounting all the 1-bed units and nearly half of the 2-bed units in the southern site apartments. The design of the crèche is sympathetic with the nearby houses, with similar pitched roofs, gable fronts and render/brick treatment.



SOUTHWEST ELEVATION



NORTHEAST ELEVATION



5.3 Universal Design



All the houses, apartments, duplexes and public realm have been laid out to enable easy access by all and fully comply with Part M of the Building Regulations. Building for Everyone: A Universal Design Approach has been used as a guideline for both external and internal environment design.

All main entrances to buildings will be fully accessible, including their approach.

The design of the public realm is based on the DMURS standards. Priority is given to pedestrian use of the space. All surfaces within the application boundary will be level (up to 1:50) or gently sloped (up to 1:20), to ensure the space is usable by those of various abilities. All access routes will be well lit and surfaced with firm and reasonably smooth materials having the appropriate slip resistance. Drainage gratings will be flush with the surrounding surface. The footpaths will be sufficiently wide to accommodate all users, from students with bicycles, to parents with buggies, to the elderly.

Adequate dishing at kerbs and safe pedestrian crossing areas, including raised tables, will be provided at all junctions around the site. Tactile paving surfaces will be used where necessary to warn of the absence of a kerb. All guarding and handrails will fully comply with Part M requirements, where relevant, on access ramps.

The site landscape design includes public benches to provide resting spaces for the public. Routes within the buildings are kept simple and legible for residents of all ages and abilities. Lighting and signage will be designed to enhance the environment for all users.

Entrances to all buildings will be accessible. They will be easily identifiable, with level landings of 1800 mm x 1800 mm immediately in front. Suitable surface materials will be used so as not to impede wheelchair users nor create a tripping hazard. General circulation corridors will be minimum 1200m wide.

Passenger lifts are provided to all apartments. All exit stairs from upper levels are designed to be accessible for ambulant disabled.

6.0 SUMMARY



The proposed development comprises 575 No. residential dwellings across 2 No. sites with a combined area of 14.45 hectares of residential zoned land. The northern site (8.38Ha) will facilitate the development of 309 No. residential dwellings while the site to the south (6.07Ha) will provide for 266 No. residential units. The layout will provide for a mix of dwellings and will include 388 No. housing units in the form of detached, semi-detached and terraced houses, 121 No. duplex units and 66 No. 1 and 2-bedroom apartments. A net density of 39.8 units per hectare will be achieved across both sites.

Total SHD application site area:	24.77Ha
North site in residential zoning:	8.38Ha
South site in residential zoning:	6.07Ha
Total north & south sites in residential zoning:	14.45Ha
Total in Community/Social/Educational zoning:	2.82Ha

