

ARCHITECTURAL REPORT

for

Proposed development of 62 no. dwellings & associated site works

at

**Hayestown, Rush,
Co. Dublin**

for

FINGAL COUNTY COUNCIL

prepared by

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1. DESCRIPTION OF PROPOSED DEVELOPMENT



The proposed site for the development is a T-shaped site located in the townland of Hayestown, Rush, Co Dublin, at Old Road, approx. 280m from its junction with Whitestown Road. The site is bounded on the north by the Hayestown housing development, to the west and south-west by farmland, to the east and south-east by one-off housing and small developments, and to the north-east by the Hayestown soccer pitch. The southern end of the T provides access from Old Road.

The site has an extent of 2.4ha, and has a watercourse located centrally running East-West and separating the site in two areas, that will be referred to as south of the stream and north of the stream. On three sides to the land north of the stream there is an open drain. Due to its ecological value the stream requires a 10m riparian zone to both north and south. South of the stream, the strip of land close to the entrance from Old Road is characterized by a linear shape with the narrow opening towards the stream, and North of the stream the site is of a more rectangular shape, with the stream running along the long side.

Existing buildings on the site comprise a 3-bedroom bungalow fronting on to Old Road, along with an adjoining garage and outbuildings., which are proposed to be demolished as part of the development. The immediate surrounding sites are generally characterized by similar bungalows and dormer bungalows.

The proposal is for the development of 62 no. units, comprised of 2 and 3 bed dwellings, 2 bed apartments and 3 bed duplexes, in a two storey arrangement for the dwellings and three storey for the apartment and duplex. The units are organized in blocks of varying sizes, in terraces or semi-detached form, following the shape of the site, further detailed in Section 2 of this report. Space standards within dwellings and provision of private amenity space will meet the requirements stated in Fingal Development Plan 2017-2023, as demonstrated in Appendix 5 of this report.

There is a single vehicular access provided via Old Road, with the road layout following the T-shape of the site. All roads are designed to the standards as set out in Design Manual for Urban Roads and Streets (DMURS 2019).

The intent is that the development will improve the amenity of adjoining areas and provide quality housing with a variety of units and public open spaces.

2. ARCHITECTURAL DESIGN STATEMENT

URBAN DESIGN

The T-shape of the site, and the requirement to provide access from the Old Road, and the riparian zone of the stream have together determined the road layout and distribution of house blocks within the scheme, following the same T-shape.



Context view along Old Road

The proposed main vehicular access from the Old Road is located off-centre in the narrow southern plot, leaving space for terraced housing blocks to the south-west along the road and semi-detached units in the proximity of the existing two storey houses on the south-east side. These latter houses have a shallow floor plan and have no overlooking windows to the rear at first floor level. The terrace blocks to the south west are broken up into three, and there is a balance between the two side of the road, with the narrower side containing semi-detached, narrow width, more sparsely distributed units. The terraces are further animated by the articulation of the 2-bedroom houses with a setback and change of material, and placement of bookend 2-bedroom houses or 3 storey units containing duplexes over apartments. The latter are employed at the majority of end terraces and the bookend 2-bedroom houses serve to announce the entrance to the development on Old Road.



View along the entrance road in southern portion of site

In the portion of the site two short terraces flank a set-back central space and are flanked at either end by small return terraces. All units back on to the site boundaries and are at a distance in excess of 11m, with the exception of the two central houses which once again are single aspect at first floor level with no overlooking windows. All but a handful of units address the large public open space and riparian zone to the watercourse. The central set-back square acts as a focal point, similar to a square in an urban setting, serving as end of perspective when approaching from south of stream. The

landscaped square introduces a break in the terrace units, increasing view permeability and adding visual interest to the frontage.



View approaching the north of stream units

The predominant form of the houses will be two or three storey with gable end pitched roofs and also wide fronted traditionally pitched roof. As noted above the proposed terrace blocks are generally organized with three storey units to the corners or as an end of terrace condition. The three storey units also add variety to the massing with an asymmetric roof profile and height variation. The roof geometry for the majority of the 2-bed and 3-bed dwellings with gable end street facing contributes to define a rhythm along the roads. Variety is introduced also through set backs of the 2-bed mid-terrace units that also utilize a change in material for added depth.

House density is lower than the 35 dwellings/ha stipulated in the DoHPLG density guidelines due to the riparian zone around the stream, to the particular configuration of the site and to the low density of the surrounding housing which is generally single storey or dormer bungalow. If this riparian zone is excluded the density achieved is 30 dwellings/ha.

MOVEMENT AND PERMEABILITY

The site has one vehicular entry point, from Old Road, that serves the entire site. There will be a road from this entrance running N-S direction, with a proposed bridge over the centrally located watercourse and joining an E-W direction road to the north of the site. The E-W road also has at each end a cul-de-sac, to the east serving 7no. units, and to the west serving 6 no. units.

All proposed carriageways are 6.0m wide to facilitate end-on parking. For fire tender access and refuse trucks at each end of the E-W road and to the junction of E-W and N-S roads, a hammer head arrangement is provided. The two cul-de-sacs will not require fire tender access as they are within maximum distances and turning hammerheads are provided at their entry.

There is no pedestrian footpath along Old Road. The proposed new footpath will be configured to allow a future expansion of the Old Road carriageway, as requested by FCC Roads Department. The footpath will be 2.5m wide to the full frontage of the development.

Parking is provided in accordance with the current FCC Development Plan standard of 1-2 spaces per dwelling, depending on the number of bedrooms, with minimum 1 space for all 2 bed units and 2 spaces for all 3 bed units. The majority of the dwellings have in-curtilage parking. For apartments parking is provided either in-curtilage or in the proximity of the units, and off-street parking is provided for visitors, a percentage of which are allocated for disabled parking.

There is an existing laneway access from Old Road, between existing houses that provided pedestrian access to the north of the site. It is proposed to be close this off as it risks becoming a locus for anti-social behavior. The Old Road frontage will be gated and the entry point into the northern portion of the site will be walled off. The main entry point from Old

Road and the bridge over the watercourse will serve as main pedestrian access to the development north of the stream. No other pedestrian linkages are proposed.

Cycle spaces for apartments units A8/A9 are provided to the rear gardens side-accessed, and cycle spaces for duplex units D6 are provided to the front of the units externally in the vicinity of the entrances. Cycle parking for houses will be in front or rear gardens. Provision will be made for a Sheffield cycle stand to front gardens of all middle terrace units for easier bike access and storage. Cycle spaces for visitors will be provided near public open space areas and distributed in a balanced manner throughout the site, with a total no. of 18 visitor cycle spaces provided. Cycle access through the scheme will be safe due to the very low traffic volume.

Pedestrian movement to the site is facilitated by 2m wide footpaths and crossing points will be provided as required throughout the site to facilitate safe crossing, using tactile paving and dished kerbs as necessary for accessibility.

Traffic calming/speed control measures have been considered for the main road linking the development to Old Road, where there is a long uninterrupted section of road. This will be achieved by way of raised speed ramps with a change in surface colour. Corner radii of 6m are proposed to facilitate the turning of refuse trucks and fire tenders and at the main access from Old Road it is proposed to reduce the radii to 4.5m and introduce a continuous raised level crossing designed to give pedestrians priority over the footpath.

Sightlines to Old Road have been provided in accordance with the Design Manual for Urban Roads and streets. Required sightlines for the proposed development are 45m taken 2.4m from the edge of the road. East of the site vehicular access there are existing walls and piers which are proposed to be demolished and such boundary walls will not interfere with visibility. The brick pier and low of the adjoining property are low level, under 900mm in height.

LANDSCAPING & OPEN SPACE

The landscape masterplan has been designed by a chartered landscape architect to illustrate the soft and hard landscape proposals for the scheme. The design has been influenced by the presence of an existing stream, road sightlines, drainage and street lighting layouts. The design comprises Public Open Space with active and passive spaces, sustainable design elements, riparian zone, planting design and boundary treatments as detailed.

Public Open Space (POS) located a minimum of 20m distance from residential areas to reduce noise. The POS provides both active and passive spaces. Active – two children's play areas are located in the western part of the central POS, they are overlooked by residential units, one natural play area set in grass for the over 10 year old group, it uses tree trunks, boulders and informal timber elements, the other more formal play area uses traditional play equipment including rockers, see-saw and swings, it is aimed at the under 10 year olds. The formal play area is 250m² in size with 5No. pieces of equipment to meet RoSPA safety standards, it also has solid bar fencing (black) as a safety feature and to prevent dogs entering this space. A separate grass kick about space is also provided in the eastern part of the POS. Passive- a series of looped paths are provided with south facing sitting areas around the central POS, south facing seats are also provided within the planted Rain-garden along the northern part of the site.

Sustainable design elements – the scheme includes various SuDS elements such as tree pit soakaways, swales, 2 detention basins and a public Rain-garden. All pedestrian paving and play surfaces within the POS are porous to assist the sustainable drainage across the site.

Riparian Zone- the 10m width riparian zone has been kept free from built elements, all existing vegetation has been retained and supplemented with native, flood tolerant, tree planting.

The planting design responds to the function of the spaces and includes: ornamental grasses and native wildflowers in the swales, naturalised bulb planting within meadow grass to give 4-5months of flowering colour and pollinator value, native species including parkland tree species in the POS, trees are set back a minimum of 3m from junctions to allow for sight

lines and are not within 7m of a lighting column, planting to front gardens includes small trees species, columnar in shape and low evergreen hedges.

Boundary treatments include: retention of boundary trees and hedges where possible to maintain ecological corridors and help to assimilate the development in to the landscape, gaps in hedges (within the site boundary) are planted with native species and the use of Weld mesh fencing to allow for transparency of the boundary vegetation, public facing boundary treatments between houses are high quality brick and stone clad, concrete panels are provided in between rear gardens.

Maintenance: to assist with keeping the scheme low in maintenance the following features have been incorporated: proposed mounds are not greater than 1.5m in height to allow for ride-on mower access, swales have a min. 1m wide flat base and side slopes no greater than 1:5 also to accommodate ride-on mowers, meadow grass in the riparian zone with a twice annual mowing regime to reduce the requirement for grass cutting.

More than half of the units in the scheme address the green public open space, capitalizing on views and southerly aspects. All public open spaces are overlooked by surrounding homes so that the amenity is safe to use providing passive supervision.



View from the Main Public Open Space



View from the North-Centre Rain Garden Public Open space

Typical house 7.2m deep frontages to houses with in-curtilage car parking allow for brick bin stores and a small area for planting to the front of the units and a narrow strip of planting between adjoining front gardens, with a columnar tree and shrubs serving as boundary line. The planted narrow strip ties in with the proposed drainage strategy. To the rear most of the units will have conventional back gardens, with grassed areas and hard surfaces to the external terraces connecting with interior living spaces.

The corner units comprising of apartment at ground floor and duplex unit to first and second floors, have front gardens with low brick walls with powder coated galvanized railings to footpath and mid height brick walls between units. The ground floor apartment units take benefit of a generous rear garden, while the duplex unit has access to a large terrace area of private open space at the first floor level, bounded by 1.8m high opaque glazing towards the back garden of the ground floor apartment to provide privacy, and 1.1m high glazed panel railing to the front garden.

BOUNDARY TREATMENTS AND IMPACT ON NEIGHBOURS

The boundaries to Old Road will be front garden boundaries, with mostly open front for car parking access interrupted by planting areas. In the southern section of the site the boundaries to the east is clearly delineated by a 2m capped blockwork wall which will be retained. To the west an existing blockwork wall which runs part of the length of the boundary will be supplemented by a new capped blockwork wall 2.1m high. Planting on the field side of this boundary will be retained.

In the riparian zone along the stream existing boundary treatments will be retained. On the northern boundary it is proposed that a land drain be installed in the existing drainage ditch, and that the ditch itself be backfilled by hardcore. A new boundary of 2m high weld mesh fencing will then be installed along this boundary, with the exception of areas where a substantial permanent boundary treatment already exists. The use of a post and panel fence will facilitate the retention of as much planting as is possible along this boundary. Fingal County Council will engage with neighbours along this boundary prior to work commencing to agree the details of this boundary treatment. On the eastern boundary to the northern field the ditch will also be drained and filled, but it is proposed to retain the existing substantial boundary treatments and associated planting. On the western boundary to the northern portion a 2m high post and plank will be fitted to the rear of the proposed dwellings on the boundary line. In the riparian zone the existing hedge treatment will be left in place.

Overlooking and overshadowing of existing properties will be avoided through the maintenance of a distance of 11m to boundaries, with the exception of the shallow plan units (House Type H1) discussed above which have no overlooking windows to the rear at first floor level. As noted above the first-floor terraces to the duplex units are enclosed on two sides by opaque glass above eye level to prevent overlooking of adjacent gardens. On the Old Road frontage, the eastern flanking building aligns with the frontage of the adjacent bungalow. On the western side the building line breaks down with further setbacks so the western flanking building steps forward to align with the building line established by the bungalows 2 sites to the north.

DWELLING DESIGN

The buildings will have a painted render finish over a brick ground floor. Mineral paints with biocidal properties are proposed to ensure durability of the finish over time and low maintenance (20-30 years generally advised, maybe less given exposure). Brick is proposed for the ground floor, garden walls and enclosures to the front and is envisaged as being of a buff colour, which has appropriate durability for pedestrian level use, but other types may be considered and will be agreed with the Planning Department based on site samples.

Windows have a vertical proportion and will be aluclad with a light grey colour externally which will match the colour of rainwater goods and other trims. Standing seam metal roofs are proposed for the pitched roofs, most likely in a coated aluminium finish. The entrances to the houses will have either precast concrete canopies with side brick piers or entrance area will be recessed.

All dwellings comply with the DoHPLG and Development Plan space standards, as demonstrated in the attached Housing Quality Assessment Report, and all dwellings are dual aspect at a minimum.



A2 Architects, St. George's Place Social Housing – form and material reference



A2 Architects, St. George's Place Social Housing – form and material reference

3. HOUSING QUALITY ASSESSMENT

a. Residential Zoning

The site has a Zoning Objective: *RS-Residential Area (Provide for residential development and protect and improve residential amenity)* in the Fingal Development Plan 2017-2023.

The proposal is for the construction of 62 no. new units on the site at Hayestown, Rush, Co. Dublin and associated site development works. Pedestrian and vehicular access is to be from Old Road to the South.

The site development and building is to fully meet standards and guidelines in the current County Development Plan and all relevant guidelines provided by the DHPLG for residential development. The building and access is to be designed and constructed fully in compliance with Current Building Regulations in particular Part M, access and Use and Part B, Fire.

b. Sustainable Community Proofing

The site lies approximately 300m from the R128 regional road and approximately 2km from Rush town centre with its shopping and entertainment facilities; and approximately 1.5km from South Beach Rush for recreational activities.

The site lies within a mixed tenure, mixed income neighborhood. It is generally accepted that 400m (5-minute walk) to 800m (a ten minute walk) represents the 'pedshed' - a suitable distance from which residents should be able to access local services and convenience shopping. (Ref Quality Housing for Sustainable Communities pages 7, 31). Figure 1 (extract from googlemaps) shows services and facilities within 1200 m of the site.



Figure 1: Extent of site (red outline). Also shown are facilities, services within 1200m of the site.

Within 400m (5 minutes' walk)

- Clochancora Montessori School
- Crosscare Community College
- Hayestown Football Pitch

400 to 800m (10 minutes' walk)

- Tesco Supermarket
- The Millbank Park
- Rush National School
- Rush Library
- Mill Bank Pre-school
- Millbank Theatre

800 to 1200m (20 minutes' walk)

- SuperValu Supermarket
- Rush Community Centre

In addition, in terms of public transport facilities, the site is located close to Whitestown Rd which is served by Dublin Bus routes 33, 33-N, 33a, 33x providing good public transport connectivity.

Given its proximity to numerous retail, cultural, educational, recreational and healthcare facilities located close-by and its location close to Public Transport, the development of the site for social housing would contribute to the creation of sustainable mixed communities in accordance with national and local statutory planning policy, and raises no concerns as to sustainable community proofing. See Appendix A – Site Location Map

 Mix of Dwelling Types:

The following mix of unit types is included in the proposal:

- | | |
|----------------|----|
| - 2-bed units: | 17 |
| - 3-bed units: | 45 |

 Total no. of units: 62

This mix has been agreed with FCC Housing Department, based upon their assessment of housing need, the objective to achieve a balanced mix of dwelling types and size, and taking account of the location and nature of the proposed development.

The objectives of Fingal Housing Strategy 2017-2023 have also been considered in deciding upon the mix of dwellings. It is considered that the proposal will make a positive contribution to the existing dwelling mix in the locality by providing dwelling types which are not currently available.

The proposal will include two bedroom and three person units; this is in accordance with guidelines in Quality Housing for Sustainable Communities (DEHLG, 2007) and Sustainable Urban Housing: Design Standards for New Apartments;

Guidelines for Planning Authorities (DHPLG 2018) paragraph 3.5 and 3.6, which considers this dwelling type necessary in Social Housing. The 7 no. 2 bed ground floor apartment units (Types A9/A8) have been designed to meet Universal Design criteria and can be specially adapted for medical needs.

c. Residential Density:

The site is currently a greenfield site and is considered to be an under-utilized, greenfield site in a suburban location (DEHLG, 2009 and FDP, 2017-23). The area of site is 24,133 sqm (2.41Ha), giving a net density of 25.7 units per hectare.

The density is low due to the following:

- A 10 metre buffer zone required to the riparian strip to the existing water course (ditch) centre of the site within which no development works can take place.
- The unusual T-shaped configuration of the site with relatively narrow widths, particularly when the riparian strip is taken into account
- The single storey nature of most of the adjoining development

Excluding the riparian strip buffer zones, the area of site is 2.04 Ha which gives a net density of 30.4 units per hectare.

d. Public Open Space:

As per Objective DMS59 of Fingal Development Plan 2017-2023, every home within the scheme is within 150m walking distance of a pocket park, small park, local park or urban neighborhood park. This proximity can be noted on the Site Development Plan in Appendix A.

e. Separation Distances:

The layout of the three storey blocks and two storey terraces is such that separation distances of minimum 22m between opposing first floor windows as per Objective DMS28 is achieved. To allow for access and maintenance a separation distance in excess of 2.3m is provided between end units as required by Objective DMS29.

f. Site Safety and Security:

Windows to habitable rooms on all elevations provide passive surveillance of communal external areas within the curtilage of the site including the entrance to the site, parking areas and locations providing access to bin and bicycle storage. A site lighting scheme will be included in the detailed design to ensure safety and security at night.

g. Accessibility

As required by Part M, Access and Use, of the Building Regulations, the buildings are designed to ensure that people can safely and conveniently approach and gain access to all the units. Where the habitable rooms are not located at ground level, the stairs provided are suitable for use by ambulant disabled persons.

h. Communal Amenity Space

The minimum requirement of Communal Amenity Space for the proposal is 2,413 sqm of accessible, secure and usable outdoor space. (10% of the site area 24,133 sqm)

Within the curtilage area of the site, approximately 3,450 sqm (14,4%) will be 'green' landscaped surface in three locations throughout the site. Of these, the location, enclosure and orientation of these spaces make it suitable for the communal amenity of residents, including families with young children and those who are less mobile. All site curtilage areas will be overlooked by habitable rooms and outdoor lighting will ensure safety. A detailed description of the public open space strategy included in Section 2 "Architectural Design Statement" above.

i. Bicycle Storage

All units other than upper duplex units are provided with an area of private open space to the rear which can be used for bicycle parking. In addition the middle terrace units are provided with bike stands to the front garden. In the upper duplex units where the habitable rooms are not located at ground level, storage space is accommodated in the proximity of the entrance, in the front garden.

j. Car Parking:

Car parking requirements as per Fingal Development Plan 2017-2023, Table 12.8 - Car Parking Standards, are fulfilled as follows:

Block no.	No of 2-bed units	No of 3-bed units	No of bays required 2-bed units=1.5 bays each	No of bays required 2-bed units=2 bays each	No of bays required 3-bed units=2 bays each	No of parking bays required	No. Of street parking bays provided (sorted by proximity)	No. of en-curtilage parking bays provided
1	1	3	0	1	6	7	0	8
2	2	3	0	2	6	8	0	10
3	2	5	0	2	10	12	0	14
4	1	3	1.5	0	6	7.5	0	7
5	1	4	1.5	0	8	9.5	1	9
6	4	7	3	2	14	19	1	20
7	0	2	0	0	4	4	0	4
8	4	7	3	2	14	19	1	20
9	1	6	1.5	0	12	13.5	0	13
10	0	2	0	0	4	4	0	4
11	0	2	0	0	4	4	0	4
12	1	1	0	1	2	3	0	3
Visitor						3	8	0
Total no. Of Parking Bays						113.5	11	116
								127

Access from parking spaces to the building entrance will comply with Part M Access and Use, of the Building Regulations. There will be 2no. disabled parking bays, which is 5% of the total number of bays.

Provision by way of ducting will be made for electric charging points to each dwelling with in-curtilage parking, and at central locations to each area of off-street parking.

k. Refuse Storage and Bins:

All units are provided with a bin storage area for the occupants' own use. These are to be screened from view by brick walls. The size is suitable to allow operation of a three-bin system of segregation i.e. black, brown & green bins.

l. Gross Floor Areas of Dwellings:

In the interest of safeguarding standards and avoiding building to minimum standards, for schemes of more than 10 units, the majority of units must exceed the minimum floor area standard by 10%; (DHPLG 2018 and Fingal Development Plan 2017-23, Objective DMS26)

All 62 units in the current proposal exceed the minimum Gross Floor Area; % exceedance is included in the table of space standards in Appendix B.

Averaged across all units the Gross floor Area is 10% above the minimum guidelines.

m. Space Standards:

The dwellings have been planned to ensure compliance with space standards in Fingal Development Plan 2017-23 and guidelines in DHPLG (2018) as follows (see appendices B of this report):

- Gross floor areas
- Individual room sizes
- Aggregate floor areas
- Principal room dimensions
- Private amenity space
- Communal amenity space

n. Layouts of individual units:

Floor plans included in submission, demonstrate:

- Typical arrangement of furniture for each room.
- Freedom of circulation, appropriate to activities.
- Potential for movement of larger items of furniture into and between rooms.
- Living space appropriate for family gatherings, including occasional visitors.
- Working area and storage facilities appropriate to likely activities.

- Door swings do not interfere with other doors, furniture or circulation routes.
- Principal room dimensions.

o. Aspect of dwellings:

Criterion is that a minimum 50% of dwellings shall be dual aspect. All dwellings have dual aspect, with those on the corners having fenestration on three facades. All the houses have living areas facing east, west or south to ensure adequate indoor light quality during the day.

p. Ceiling Height:

Units Type H1, H8, H10&H12 have a ground floor ceiling height of 2.58m, and the upper floors are 2.5m. Types A8&A9 ground floor units have a minimum ceiling height of 2.7m, Type D6 unit has a first floor ceiling heights of 2.625m and second floor ceiling height 2.5m.

q. Kitchens:

Kitchens are located adjacent to dining and living areas. Sizes and layouts have been designed to provide:

- Adequate high and low level storage;
- Adequate worktop surface and space for appliances,
- Optimum work sequence.
- Efficient ducting for services.

r. Internal Storage:

Appendix B demonstrates that each unit meets the minimum internal storage requirement. In units where the storage requirement is greater than 3.5sqm, it is divided into two or three locations so that none exceed 3.5sqm. The storage provided is split between general storage accessible from circulation areas and storage provided within bedrooms, a total of which exceeds the standard for internal storage as set in Table 12.1 of the Fingal Development Plan 2017-2023.

s. Private Amenity Space:

Each unit is provided with Private Amenity Space in the form of either a garden for ground floor units and balconies for first floor units or rear gardens for terraced houses.

Areas of Private Amenity Space for each unit exceed the minimum requirements of guidelines as demonstrated on the Site Development Plan (Appendix A).

All Private Amenity space is accessible from living areas through glazed doors. Balconies are guarded in accordance with guidance in Building Regulations Technical Guidance Document K.

t. Daylight, Sunlight:

The following guidance and standards have been considered in the design of the proposed development:

- Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (B.R.209, 2011); and
- B.S. 8206 Lighting for Buildings, Part 2 2008: Code of Practice for Daylighting.

u. Acoustic Privacy:

To ensure compliance with Part E, Sound, of the Building Regulations, the form of construction will be in accordance with guidance in TGD Part E, 2014. Testing of the completed units will be carried out to demonstrate this compliance.

Windows and patio doors will be specified to provide high acoustic and thermal performance.

v. Energy Performance:

Detailed design of individual dwellings will ensure high levels of occupant comfort, and compliance with requirements expressed in current, relevant parts of the Building Regulations:

- Part F: Ventilation;
- Part J: Heat Producing Appliances;
- Part L: Conservation of Fuel and Energy.

In particular the requirement for nearly zero energy buildings and renewable sources of energy will be addressed in the detailed design and construction stages.

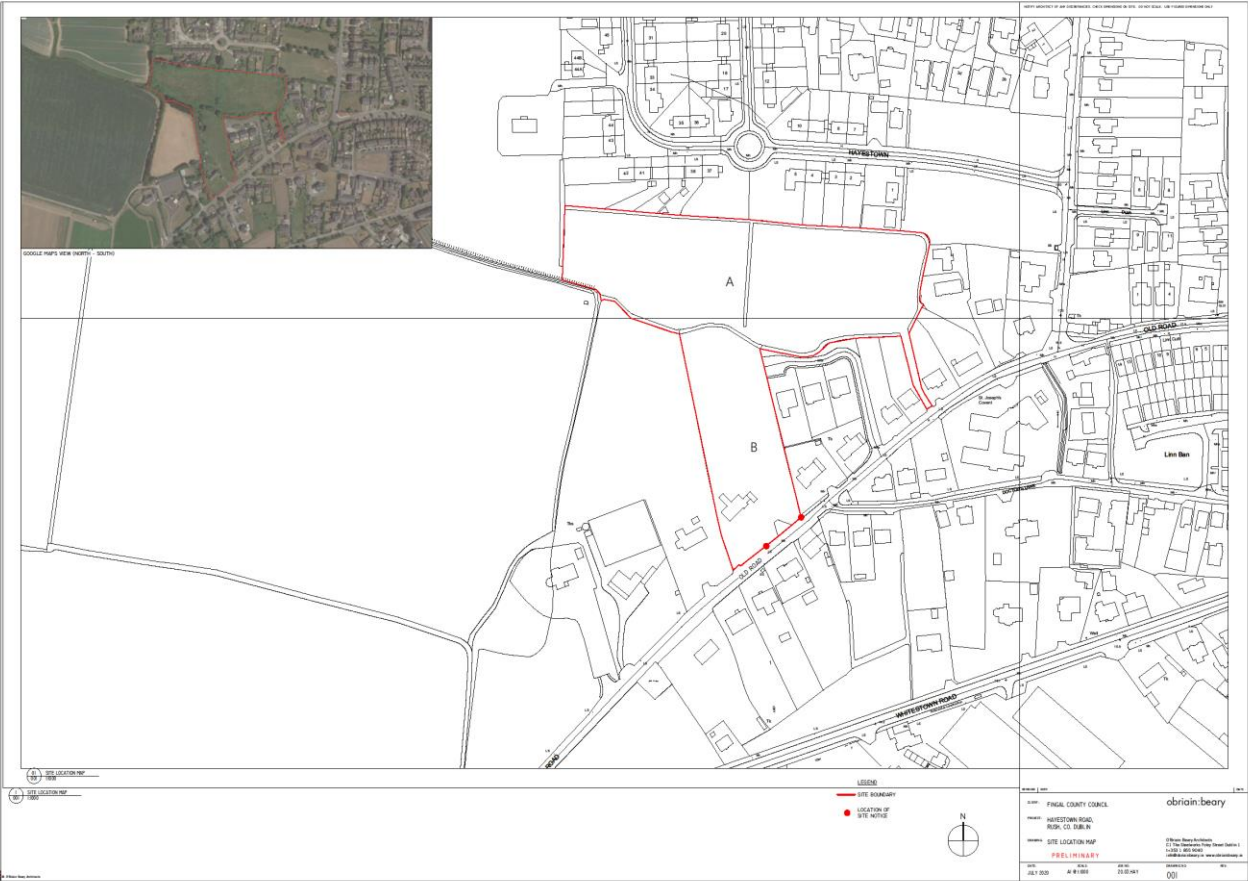
w. Design Standards:

The following documents have been consulted in the pre-planning design stage:

- Fingal Development Plan 2017-23. (FDP, 2017-23)
- Quality Housing for Sustainable Communities; (DEHLG, 2007)
- Sustainable Urban Housing: Design Standards for New Apartments; Guidelines for Planning Authorities; (DHPLG 2018)
- Sustainable Residential Development in Urban Areas; Guidelines for Planning Authorities (DEHLG 2009)
- Recommendations for Site Development Works for Housing Areas; (DOELG 1998).
- Design Manual for Urban Roads and Streets (DMURS 2019)

4. APPENDIX A:

a. Site Location Map



5. APPENDIX B:

a. Table of Space Standards.

Types	Accommodation	Total Gross Floor Area m2	No. Units	Target Gross Floor Area m2	Percentage variation	TOTAL areas per Type m2	Target Total areas	Comments
A8	2B3P1S	80.1	5	73	9.7%	400.5	365	Designed for special needs
A9	2B3P1S	85.5	2	73	17.1%	171	146	Designed for special needs
D6	3B5P2S	107.5	7	90*	19.4%	752.5	630	*doesn't allow for stairs in duplex
H8	3B5P2S	98.2	32	92	6.7%	3142.4	2944	
H1	3B5P2S	99.4	6	92	8.0%	596.4	552	
H10	2B3P2S	79.2	2	70	13.1%	158.4	140	
H12	2B4P2S	88	8	80	10.0%	704	640	
Totals			62		9.4%	5925.2	5417	

b. Accommodation Schedules

i. House Type H8 – 3 bedroom, 5 person, two storey

HAY DWELLING H8 3B-5P-2S				
	ZONE NAME	ACTUAL AREA (SqM)	EQUIVALENT FCC GUIDELINES (SqM)	COMPARISON OF FLOOR AREA (%)
TOTAL STORAGE AREA				
	STORAGE	6.4	5.0	128.0%
TOTAL LIVING/KITCHEN/DINING AREA				
	AGGREGATE LIVING AREA	34.6	34.0	101.8%
TOTAL BEDROOM AREA				
	BEDROOM 1	13.1	13.0	100.7%
	BEDROOM 2	11.6	11.4	101.7%
	BEDROOM 3	7.2	7.1	101.4%
GROSS INTERNAL AREA				
	GROSS INTERNAL AREA	98.2	92.0	106.7%

ii. House Type H12 – 2 bedroom, 3 person, two storey

HAY DWELLING H12 2B-4P-2S				
ZONE NAME	ACTUAL AREA (SqM)	EQUIVALENT FCC GUIDELINES (SqM)	COMPARISON OF FLOOR AREA (%)	
TOTAL STORAGE AREA				
STORAGE	7.6	4.5	168.8%	
TOTAL LIVING/KITCHEN/DINING AREA				
AGGREGATE LIVING AREA	30.2	30.0	100.7%	
TOTAL BEDROOM AREA				
BEDROOM 1	14.4	13.0	110.7%	
BEDROOM 2	11.4	11.4	100.0%	
GROSS INTERNAL AREA				
GROSS INTERNAL AREA	88	80.0	110.0%	

iii. Apartment Type A8 – 2 bedroom, 3 person, single storey

HAY DWELLING A8 2B-3P-IS - UNIVERSAL DESIGN DWELLING				
ZONE NAME	ACTUAL AREA (SqM)	EQUIVALENT FCC GUIDELINES (SqM)	COMPARISON OF FLOOR AREA (%)	
TOTAL STORAGE AREA				
STORAGE	7.2	6.0	120.0%	
TOTAL LIVING/KITCHEN/DINING AREA				
KITCHEN/DINING/LIVING AREA	30.9	30.0	103.0%	
TOTAL BEDROOM AREA				
BEDROOM 1	13.9	13.0	106.9%	
BEDROOM 2	8.3	7.1	116.9%	
GROSS INTERNAL AREA				
TOTAL GROSS INTERNAL AREA	80.1	73.0	109.7%	

iv. Apartment Type A9 – 2 bedroom, 3 person, single storey

HAY DWELLING A9 2B-3P-IS - UNIVERSAL DESIGN DWELLING				
	ZONE NAME	ACTUAL AREA (SqM)	EQUIVALENT FCC GUIDELINES (SqM)	COMPARISON OF FLOOR AREA (%)
TOTAL STORAGE AREA				
	STORAGE	8.1	6.0	135.0%
TOTAL LIVING/KITCHEN/DINING AREA				
	KITCHEN/DINING/LIVING AREA	34.6	30.0	115.3%
TOTAL BEDROOM AREA				
	BEDROOM 1	13.9	13.0	106.9%
	BEDROOM 2	8.3	7.1	116.9%
GROSS INTERNAL AREA				
	TOTAL GROSS INTERNAL AREA	85.5	73.0	117.1%

v. Duplex Type D6, 3 bedroom, 5 person, two storey

HAY DWELLING D6 3B-5P-2S				
	ZONE NAME	ACTUAL AREA (SqM)	EQUIVALENT FCC GUIDELINES (SqM)	COMPARISON OF FLOOR AREA (%)
TOTAL STORAGE AREA				
	STORAGE	9.0	9.0	100.0%
TOTAL LIVING/KITCHEN/DINING AREA				
	AGGREGATE LIVING AREA	37.1	34.0	109.2%
TOTAL BEDROOM AREA				
	BEDROOM 1	14.2	13.0	109.2%
	BEDROOM 2	7.2	7.1	101.4%
	BEDROOM 3	11.9	11.4	104.4%
GROSS INTERNAL AREA				
	TOTAL GROSS INTERNAL AREA	107.5	90.0*	119.4%

vi. House Type H1, 3 bedroom, 5 person, two storey

HAY DWELLING HI 3B-5P-2S				
	ZONE NAME	ACTUAL AREA (SqM)	EQUIVALENT FCC GUIDELINES (SqM)	COMPARISON OF FLOOR AREA (%)
TOTAL STORAGE AREA				
	STORAGE	5.3	5.0	106.0%
TOTAL LIVING/KITCHEN/DINING AREA				
	AGGREGATE LIVING AREA	34.7	34.0	102.1%
TOTAL BEDROOM AREA				
	BEDROOM 1	13.0	13.0	100.0%
	BEDROOM 2	7.1	7.1	100.0%
	BEDROOM 3	11.4	11.4	100.0%
GROSS INTERNAL AREA				
	TOTAL GROSS INTERNAL AREA	99.4	92.0	108.0%

vii. House Type H10, 2 bedroom, 3 person, two storey

HAY DWELLING HI0 2B-3P-2S				
	ZONE NAME	ACTUAL AREA (SqM)	EQUIVALENT FCC GUIDELINES (SqM)	COMPARISON OF FLOOR AREA (%)
TOTAL STORAGE AREA				
	STORAGE	3.9	3.5	111.4%
TOTAL LIVING/KITCHEN/DINING AREA				
	AGGREGATE LIVING AREA	28.4	28.0	101.4%
TOTAL BEDROOM AREA				
	BEDROOM 1	13.4	13.0	103.1%
	BEDROOM 2	7.6	7.1	107.0%
GROSS INTERNAL AREA				
	TOTAL GROSS INTERNAL AREA	79.2	70.0	113.1%