

HIGH LEVEL MASTERPLAN AND DESIGN STATEMENT

LOTT LANE KILCOOLE, CO WICKLOW - MAY 2023



Greystones Delgany Kilcoole Local Area Plan 2013-2019

MU Mixed Use

RES15 To provide for a mixed house development including a range of tenure types (e.g. social, affordable and private housing) and community facilities (as determined by the planning authority, in conjunction with Community and Enterprise section of the Council) in the MU mixed use zone , subject to the agreement of a Master Plan for the entire zone. An equipped playground of c 200m2 shall be provided within this zone. This land may also be suitable for the development of a community building.

A master plan shall set out details regarding how the objectives of the subject site are to be achieved, including for example, the allocation of uses throughout the site, address principles of design (e.g. heights, mass, materials), transportation links and permeability, details regarding phasing of the development, and any other matters as required by the planning authority.

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BACKGROUND

O Connell Mahon Architects (OCMA) were appointed by Wicklow County Council to draw up a Masterplan for the site at Lott Lane (Townland of Ballydonarea), Kilcoole to meet the planning requirement relating to the Mixed Use (MU) zoning of the site under the Delgany and Kilcoole Local Area Plan (LAP) 2013-2019. A stated objective of the LAP (RES15) is to provide a mixed housing development on the site subject to the agreement of a Masterplan. This Masterplan set out details regarding the allocation of uses throughout the site: it addresses principles of design as well as transportation to and within the site and permeability links for cyclists and pedestrians.

METHODOLOGY

This plan was undertaken by OCMA as contracted by Wicklow County Council, leading a multidisciplinary team where AECOM provided professional advice on civils provision and vehicular and pedestrian access and movement. Meetings took place with elected representatives of Wicklow County Council and with departments of engineering, planning and architecture in the council. External consultations were undertaken with members of the construction industry. Out of this analysis and research, an outline site layout was formulated (See Maps 1 and 2).

The statutory planning requirements underpin the design strategies for this plan and it is predicated on relevant government guidelines. A list of both statutory and guidance documents is given at Appendix A.

The tenure as recommended in this masterplan is subject to the developing market with regard to the Affordable Housing Bill of 2021 and to the growing need for social housing at national and local level.

SOCIAL INFRASTRUCTURE

The team analysed the town of Kilcoole and environs with respect of its size, demographic: its existing transport links and trends: its social, recreational and cultural facilities; and the available education and retail supports. These findings are tabled at Appendix B

ACCESSIBILITY

Refer to Appendix D - Accessibility Report

OBJECTIVES

The objectives of this masterplan are to develop a design strategy for the site which:

- responds to surroundings of its particular location
- facilitates good connectivity addressing vehicular, cycling and pedestrian connections into the site
- allows people to use and access the development easily
- provides guidance on the tenure and mix of housing

based on community need

- allows the development to promote a good mix of activities while considering community provision based on local need
- makes sure the development uses the resources, including land, appropriately
- allows the development to create a sense of place
- includes people friendly streets and spaces
- proposes safe, secure and enjoyable public areas
- includes buildings capable of coping with change
- makes sure the scheme provide a decent standard of amenities
- provides the car parking that are secure and attractive
- includes well thought through buildings and landscape design

ANALYSIS

Kilcoole is classified as one of 'Self Sustaining Towns' in the current (2022-2028) development plan for the county, and these are towns that require contained growth, focusing on driving investment in services, employment growth and infrastructure whilst balancing housing delivery.

The number of units proposed as appropriate for this site is 152.

Kilcoole has one primary and one secondary school and several privately run pre-school facilities: the town is also serviced by a number of sports clubs for children and teenagers including GAA and football. While there is still reliance on the car for transport to and from work and school, a third of students walk to primary/secondary school and over half either walk, cycle or use public transport.

The town has many attractive natural features being adjacent to the coast with the national monuments of St Comgall's and the rock of Kicloole sited in the town and pleasant walks within its environs.

The site of 5.06 hectares is located on Lott Lane within the boundary of the 'settlement area' as designated in the LAP less than one kilometre from the centre of the town to the south and just under a mile from the coast path to the east. It is bounded to the south by the Ballydonnerea Loop Walk running east west. The design strategy in this plan seeks to maximise the permeability from Lott Lane to the coast walk through the introduction of designated cycle and pedestrian route independent from vehicular routes.

The site slopes steeply east from Lott Lane over the initial 30m and then levels off to the east. OCMA have proposed the site layout strategy based on an analysis of these gradients with semi-detached housing where the gradient is

steepest and terraced housing to the east where the site is flattest.

There are currently two active community centres in Kicloole and a number of childcare facilities. The intention is to augment the community provision by designating 1,160msq of the site for childcare facility use.

DESIGN STRATEGIES

We consider that the proposed plan represents appropriate residential provision of both tenure and density. The density for the site has been considered in the context of national guidelines and statutory provision of development control plan and LAP. A MU designation does not provide a required density; Wicklow County Development Plan 2022-2028 designates:

- for Edge of Centre Sites: 20-35 u/ha

The Sustainable Residential Development in Urban Areas stipulated densities of 20-35u/ha for edge of centre locations in small towns. The more recent Urban Development and Building Heights has increased those densities to 35-50u/ha. The density in this masterplan is 29.5u/ha. Further calculation on Open Space and Density provision is given in Appendix C

While there are a number of pre-school facilities within the settlement area of Kilcoole, the proposed housing development will augment the need for such facilities. We note that there are currently two active community centres within the curtilage of the town. We have included in this application the provision of area of 1,065m² on the Lott Lane frontage for childcare building facility adjacent to an open area which is available to provide an equipped playground for community use. There are further open areas to the south connection with Strawberry Lane which is available for public allotments.

The Interurban Cycle Network Route passes through Kilcoole and the proposed masterplan maximises cycle use as promoted in the National Cycle Policy Framework and in the county development plan, through the introduction of a designated cycle route through the site and the provision of a cycle path along its Lott Lane frontage. Pedestrian link through the site to the adjacent Strawberry Lane increase the permeability from the west of Lott Lane to the amenities of the Ballydonarea Loop Walk and the coast.

The attached two plans set out the design strategies given above:

House Tenure, Distribution
Permeability Movement and Open Space

House Tenure

The housing is a mix of affordable and social and the majority of house units at 60% are three bed units. A third of the housing is two bed units and there are 14 single bed

social units to meet specific need as identified by Wicklow County Council for elderly or those requiring universal access: a further need for 2 fully accessible family units has been met by the inclusion of special 4-bed units within the social housing provision.

The affordable element of the housing is semi-detached and located at the east of the plan where the gradient is greatest and the semi-detached units are placed with the slope. Terraced units are used at the flatter west area of the site. Side entrance units are used appropriately to activate passive surveillance in shared open space.

House Finish Materials Specification

Walls to be traditional Sand and cementitious coating with brick feature coursing.

Doors to be contemporary high performance colour coded and glazed.

Bin housings to be prefabricated system, secure and integrated within house boundary treatments.

Roof finished throughout to be coloured concrete tile with horizontal traditional eaves and gable end facias.

Colour coded glazed windows to select tints

Density and Open Space

Calculation on these are given at Appendix C. The open space provision of 15.06% of the site discounts the area designated for community use. A variety of size and form of open space is provided and are dispersed throughout the development to give a sense of openness and encourage use.

Permeability Movement and Road Layout

The road layout in the masterplan has been designed to meet DMURS guidelines in consultation with Wicklow County Council and has been audited by AECOM. Strategy is to calm traffic and promote the pedestrian and cyclist while ensuring necessary access.

Overall Design Principles

The layout addresses the stipulations of the county development plan with respect to overlooking and densities. In addition the following principles are included.

- activate open space through passive surveillance
- provide a range of open spaces varying in size
- locate open spaces evenly throughout the development
- limit housing to two storey units as appropriate for the receiving environment
- limit off street carparking to allow houses to engage with public space
- limit carriageway width to 5.5m- 5m
- provide footpaths 2m in width
- all radii for road junctions are 3.0-4.5m
- allow for community facilities to the east and west of the site
- Provide designated cycle route throughout the site
- Provide new cyclepath to Lott Lane

CRECHE / COMMUNITY BUILDING
Area: 1160sqm

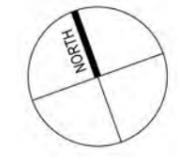
AFFORDABLE UNITS

- 3 BED SIDE ENTRANCE
- 3 BED FRONT ENTRANCE
- 2 BED SIDE ENTRANCE
- 2 BED FRONT ENTRANCE

SOCIAL UNITS

- 4 BED SPECIAL UNIT
- 3 BED FRONT ENTRANCE
- 3 BED SIDE ENTRANCE
- 2 BED FRONT ENTRANCE
- 2 BED SIDE ENTRANCE
- 1 BED APT

HOUSE TENURE DISTRIBUTION



BEDS	SOCIAL	AFFORD.	TOTAL
1 BED.	14	-	14
2 BED.	39	12	51
4 BED. SPECIAL	2	-	2
3 BED.	25	60	85
TOTAL	80	72	152
TOTAL %	53	47	100

CAR PARKING SPACES REQUIRED		
87 UNITS OVER 2 BED. x 2 CAR PARKING SP		174
51 UNITS 2 BED. x 1 CAR PARKING SPACE		51
14 UNITS 1 BED. x 1 CAR PARKING SPACE		14
+ 1 CAR PARKING SPACE/ 5 1 AND 2 BED.		13
TOTAL		252
CAR PARKING SPACES PROVIDED		265

PERMEABILITY MOVEMENT AND OPEN SPACE

NEW CYCLE PATH TO LOTT LANE

CYCLE PATH THROUGH DEVELOPMENT CONNECTING FUTURE CYCLE NETWORKS

WALKING ROUTE CONNECTING OPEN SPACES TO EXISTING LOCAL WALKING ROUTES



0 5 10 50



AREAS SCHEDULE	
OPEN AREA OF SITE OVER 10M WIDTH (sqm)	7626
AREA OF SITE DESIGNATED FOR COMMUNITY USES (sqm)	1160

OPEN AREAS SCHEDULE	
AREA 1 (sqm)	1663
AREA 2 (sqm)	235
AREA 3 (sqm)	228
AREA 4 (sqm)	408
AREA 5 (sqm)	80
AREA 6 (sqm)	1642
AREA 7 (sqm)	850
AREA 8 (sqm)	2520

1.5KM TO TOWN CENTRE

WALKING ROUTE CONNECTING TOWN THROUGH OPEN SPACES

BALLYDONERA LOOP WALK

1.5KM TO COASTAL PATH

APPENDIX A

List of References

Wicklow County Council Development Plan 2022-2028

Greystones-Delgany Kilcoole Local Area Plan 2013-2019

Sustainable Residential Development in Urban Areas 2006
Department of Environment Heritage and Local Government

Sustainable Urban Housing: Design Standards for New Apartments 2018
Department of Housing Planning and Local Government

Urban Development and Building Heights 2018
Department Housing Planning and Local Government

Design Manual for Urban Roads and Streets 2013
Department of Transport, Tourism and Sport; Department of Environment, Community and Local Government

Quality Housing for Sustainable Communities 2007
Department of Environment Heritage and Local Government

Regional Planning Guidelines Greater Dublin Area 2010-2020
Mid-East Regional Authority and Dublin Regional Authority

National Cycle Policy Framework 2009-2020

Census 2016 Central Statistics Office

APPENDIX B

Map 1 Education and Childcare Facilities Distribution

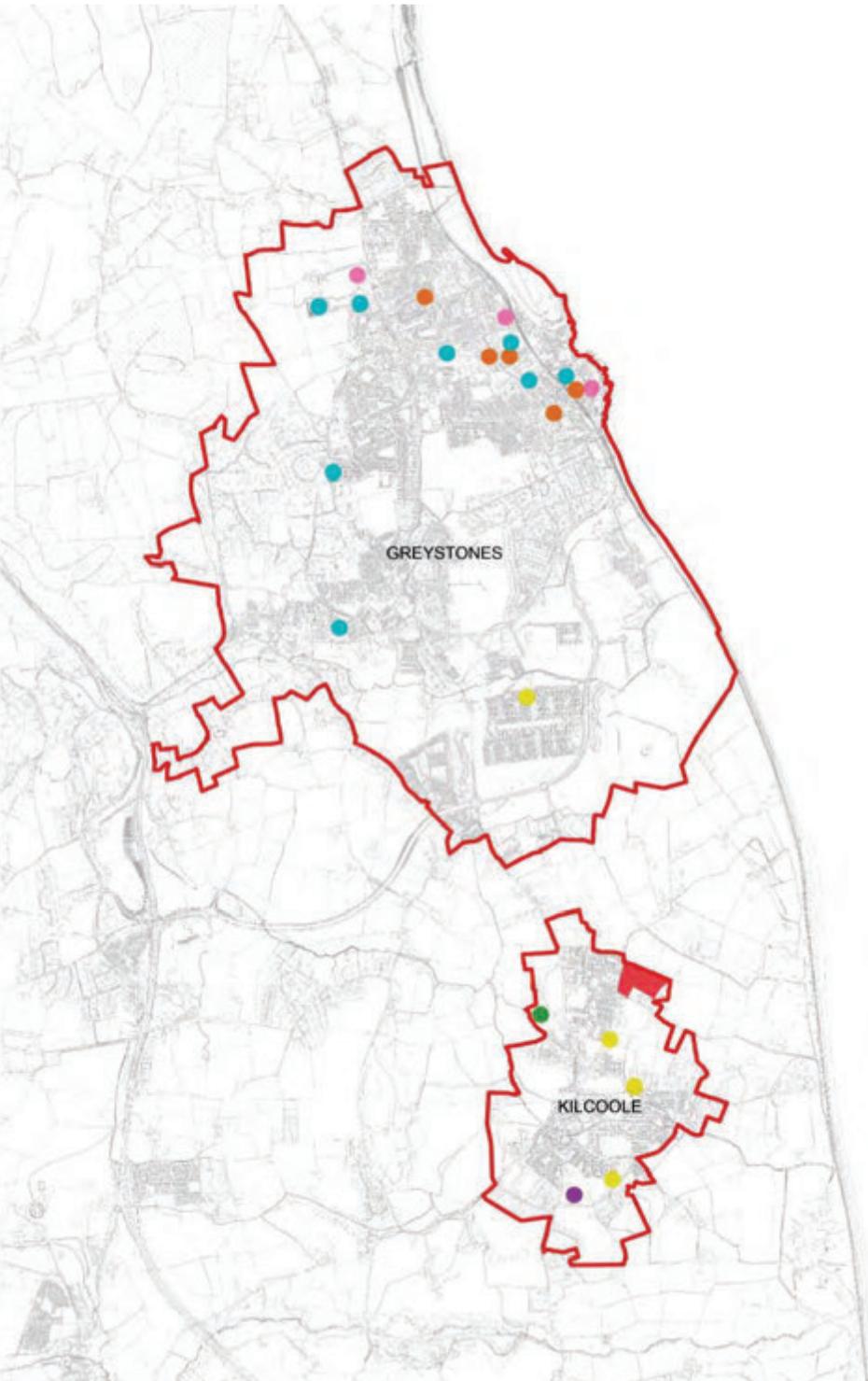
Map 2 Transport Facilities

Map 3 Recreation and Leisure

Map 4 Social

LOTT LANE MASTERPLAN MAP 1:

EDUCATION & CHILDCARE FACILITIES DISTRIBUTION



CHILDCARE

- CRECHE WITHIN 3KM RADIUS
- CRECHE WITHIN 6KM RADIUS

NUMBER OF CHILDCARE PLACES KILCOOLE

TREETOPS DAYCARE :	66
LITTLE GREEN GIANTS :	70
THE VILLAGE MONTESSORI :	22
TOTAL:	138

NUMBER OF PRESCHOOL AGE (0-4) CHILDREN IN KILCOOLE

2011 CENSUS	443
2016 CENSUS	338

PRIMARY EDUCATION

- PRIMARY SCHOOL WITHIN 3KM RADIUS
- PRIMARY SCHOOL WITHIN 6KM RADIUS

NUMBER OF PRIMARY SCHOOL PLACES KILCOOLE

KILCOOLE PRIMARY SCHOOL CAPACITY:	461
NEW ENROLLMENTS ANNUALLY:	84

NUMBER OF PRIMARY SCHOOL AGE CHILDREN KILCOOLE

2011 CENSUS	503
2016 CENSUS	653

SECONDARY EDUCATION

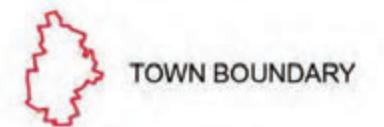
- SECONDARY SCHOOL WITHIN 3KM RADIUS
- SECONDARY SCHOOL WITHIN 6KM RADIUS

NUMBER OF SECONDARY SCHOOL PLACES KILCOOLE

COLÁISTE CRAOBH ABHANN CAPACITY:	800
NEW ENROLLMENTS ANNUALLY:	120

NUMBER OF SECONDARY SCHOOL AGE CHILDREN KILCOOLE

2011 CENSUS	288
2016 CENSUS	308



LOTT LANE MASTERPLAN MAP 2:

TRANSPORT FACILITIES

BUS ROUTE

84 AND 84X
NEWCASTLE DUBLIN

FREQUENCY:

84 EVERY HOUR
84X EVERY 30MINS UNTIL 08.55AM

TRAIN

DUBLIN WEXFORD

FREQUENCY: HOURLY

ROADS

NATIONAL

N11 DUBLIN TO WEXFORD
CONNECTION TO N11

REGIONAL

R761 BRAY - WICKLOW

LOCAL

IT LANE - SEA ROAD
IT LANE - MAIN STREET

 TRAIN STATION

 BUS STOPS

KILCOOLE RESIDENTS MEANS OF TRAVEL CENSUS 2016

MEANS OF TRAVEL	SCHOOL	WORK	TOTAL
ON FOOT	358	73	431
BICYCLE	19	10	29
BUS	141	93	234
TRAIN / DART / LUAS	43	136	179
MOTORCYCLE	1	10	11
CAR DRIVER	35	1181	1216
CAR PASSENGER	477	85	562
VAN	0	123	123
WORK FROM HOME	0	52	52
NOT STATED	32	49	81
TOTAL	1106	1829	2935

KILCOOLE RESIDENTS JOURNEY TIME CENSUS 2016

JOURNEY TIME TO SCHOOL / WORK	PERSONS
UNDER 15 MINS	960
1/4 HOUR - UNDER 1/2 HOUR	636
1/2 HOUR - UNDER 3/4 HOUR	475
3/4 HOUR - UNDER 1 HOUR	233
1 HOUR - UNDER 1 1/2 HOURS	319
1 1/2 HOURS AND OVER	115
NOT STATED	145
TOTAL	2883

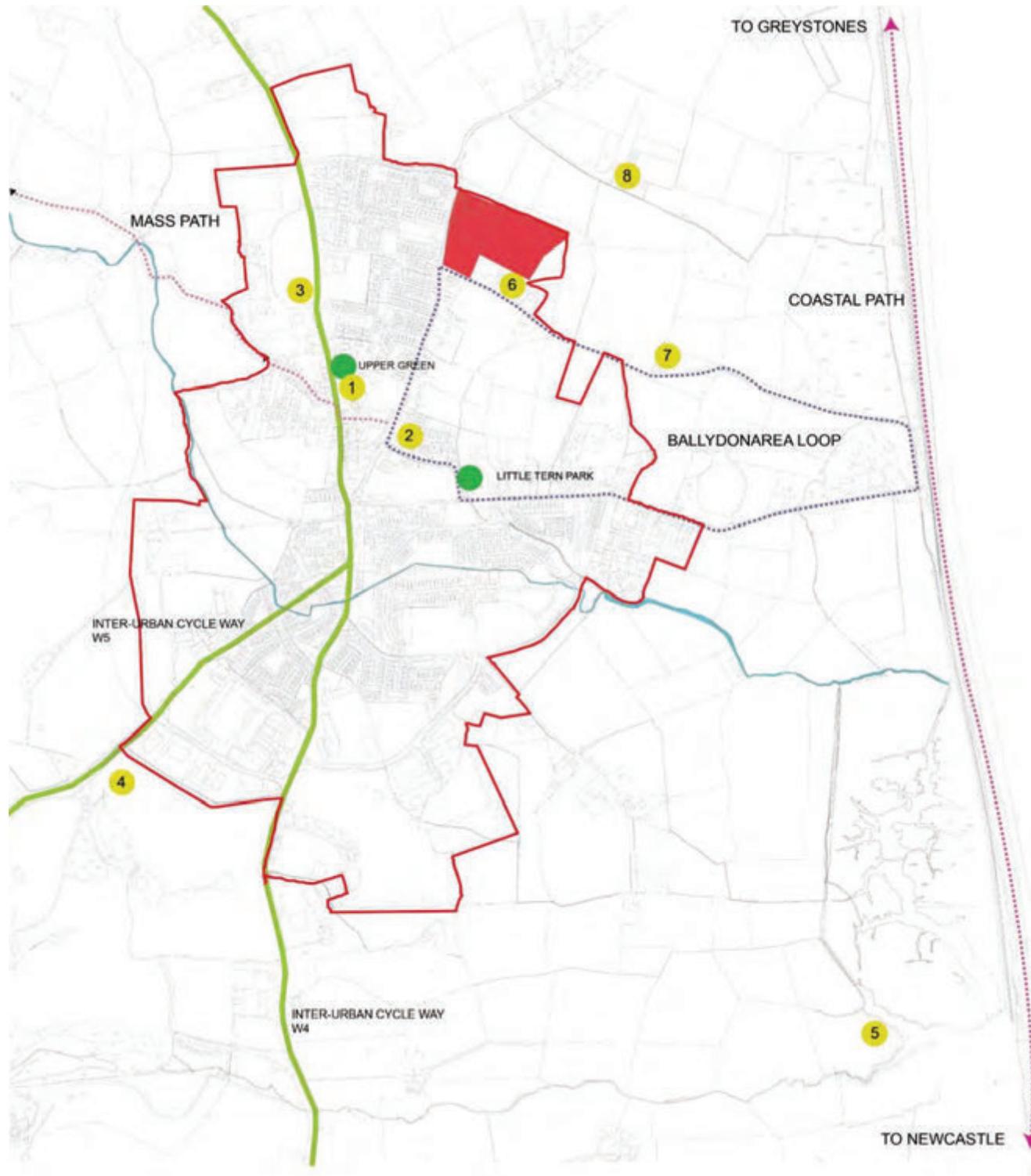
LAP (2013 -2019) LAND USE ZONING OBJECTIVES

-  ROAD OBJECTIVE:
ROAD IMPROVEMENT
-  NEW ROAD OBJECTIVE:
LONG TERM
-  NEW ROAD OBJECTIVE:
SHORT TERM

Town	Number of workers	Workers travelling to Dublin city and suburbs	% of Workers travelling to Dublin city and suburbs
Bray	13,835	6,292	45.5
Greystones-Delgany	7,827	3,791	48.4
Wicklow	4,248	1,212	28.5
Blessington	2,406	1,086	45.1
Kilcoole	1,843	704	38.2

LOTT LANE MASTERPLAN MAP 3:

KILCOOLE RECREATIONAL MAP



- COSTAL PATH
- BALLYDONAREA LOOP
- MASS PATH
- INTER - URBAN CYCLE WAY
CYCLE NETWORK PLAN 2014
- PARKS

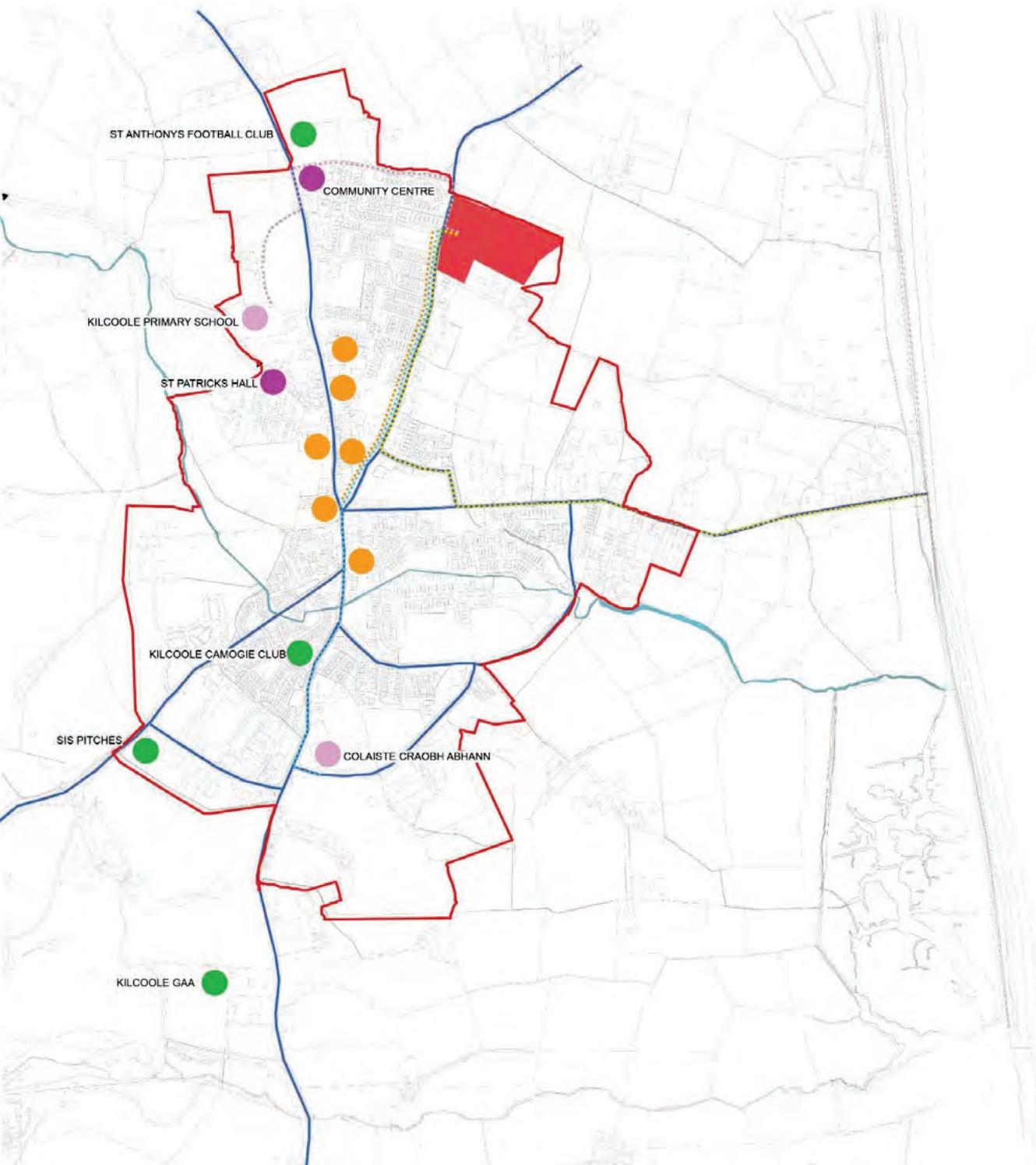
AREAS OF INTEREST

- 1 ROCK OF KILCOOLE
- 2 CHURCH OF ST COMGALL
- 3 DARRAGHVILLE HOUSE
- 4 WOODSTOCK HOUSE
- 5 THE BREACHES
- 6 BALLYDONAREA HOUSE
- 7 DONLEAVY HOUSE
- 8 GLEN ROE

-  TOWN BOUNDARY
-  SITE LOCATION

**LOTT LANE MASTERPLAN
MAP 4:**

KILCOOLE SOCIAL MAP



- SPORTS FACILITIES
- COMMUNITY HALLS
- SCHOOLS
- SHOPPING
- ROADWAY

**LOCAL ROUTES TRAVEL TIME
WALKING / CYCLING**

- - - - -	TO TOWN CENTRE
	WALKING 10 MINS
	CYCLING 4 MINS
- - - - -	TO TRAIN STATION
	WALKING 26 MINS
	CYCLING 6 MINS
- - - - -	TO PRIMARY SCHOOL
	WALKING 12 MINS
	CYCLING 5 MINS
- - - - -	TO SECONDARY SCHOOL
	WALKING 20 MINS
	CYCLING 5 MINS

- ⬮ TOWN BOUNDARY
- ➔ SITE LOCATION

APPENDIX C

Density and Open Space Calculations

LOTT LANE HOUSING DENSITY CALCULATIONS

OCMA

May-23

Wicklow County Council

PLOT AREAS				
	HOUSE TYPE	PLOT AREA (m²)	NUMBER OF UNITS	TOTAL AREA OF THIS TYPE (m²)
AFFORDABLE	AFFORD. 2BED	53	8	424
	AFFORD. 2BED SIDE ENTRANCE	55.5	4	222
	AFFORD. 3BED FRONT/SIDE ENTRANCE	63.5	60	3810
SOCIAL	1 BED APT	66.5	7	465.5
	2 BED CENTRAL UNIT	49.8	27	1344.6
	2 BED END UNIT	53	12	636
	3 BED CENTRAL UNIT	56.9	18	1024.2
	3 BED END UNIT	60.3	7	422.1
	4 BED SPECIAL UNIT	106.5	2	213
total housing plot area (m²)				8561.4

PERCENTAGE OF OPEN PUBLIC SPACE

total site area (ha) 5.06
 open space wider than 10m (m²) 7626

% of public open space 15.07%

DWELLING EQUIVALENT CALCULATION

	HOUSE TYPE	TOTAL AREA (m ²)	NUMBER OF UNITS	TOTAL AREA OF THIS TYPE (m ²)
AFFORDABLE	AFFORD. 2BED	84.2	8	673.6
	AFFORD. 2BED SIDE ENTRANCE	89.4	4	357.6
	AFFORD. 3BED FRONT ENTRANCE	102.9	41	4218.9
	AFFORD. 3BED SIDE ENTRANCE	104.3	19	1981.7
SOCIAL	1 BED APT	47.5	7	332.5
	1 BED APT	46.2	7	323.4
	2 BED CENTRAL UNIT	84.4	27	2278.8
	2 BED END UNIT	86.5	12	1038
	3 BED CENTRAL UNIT	97.4	18	1753.2
	3 BED END UNIT	99.3	7	695.1
	4 BED SPECIAL UNIT	119.4	2	238.8

total housing area 13891.6

Divided by 125m² 111.13
 site area 5.06h per 5.06H

Dwelling Equivalent 22u per h

APPENDIX D

ACCESSIBILITY REPORT

Lott Lane Housing, Kilcoole, Wicklow

Part 8 Application

APPENDIX "D" – Accessibility Report

1. Compliance with requirements included in the Wicklow County Council development Plan 2022-2028

O’Connell Mahon Architects recognises additional Access requirements introduced in the WCC Development Plan 2022-2028 and included in the following Policy Objectives:

- Housing CPO 6.20
- Community Development CPO 7.5
- Sustainable Transportation CPO 12.5

The above objectives are described as follows:

*“New significant residential or mixed use development proposals shall be required to be accompanied by a ‘Accessibility Report’ that demonstrates that new residents / occupants / employees (including children and those with special mobility needs) will be able to safely access through means **other than the private car**:*

(a) local services including shops, schools, health care and recreational facilities, and

(b) public transport services. Where deficiencies are identified, proposals will be required to either rectify the deficiency, or suitably restrict or phase the development in accordance with the capacity/quality of existing or planned linkages.”

Facilities that are proposed to be located within the Lott Lane housing development and fall into categories indicated in the Policy Objectives are as follows:

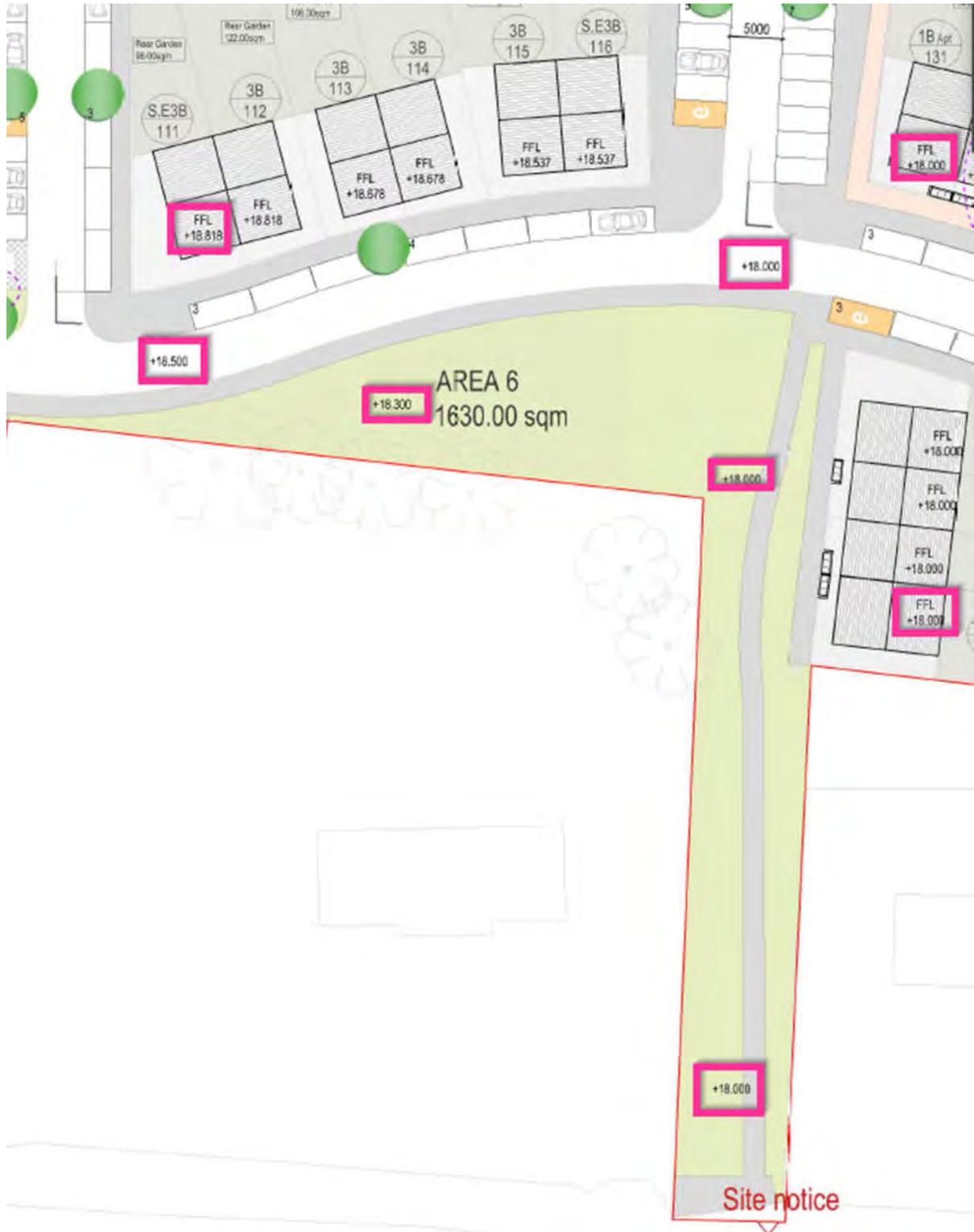
- Childcare facility – located at North-West of the site,
- Childcare building and the adjacent playground will be accessible through gentle sloped approach footpath not steeper than 1:20 gradient (as marked on the plan below.)



- Community recreational “Area 1” – located at West of the site,
- Community recreational “Area 6” – located at South of the site,
- Community recreational “Area 8” – located at West of the site.

All above recreational areas are accessible via public footpaths which are not steeper than 1: 20 gradient. See Plans below for details.





2. Application of Part M of the Second Schedule of the Building Regulations for the Proposed Development – Dwellings and Childcare Facility Building

The proposed development consisting of Dwelling units and Childcare Facility Building must meet the requirements of Part M of the Building Regulations. Part M 2010 came into operation on the 1st January 2012 and the requirements of Part M 2010 must be followed. The requirements of Part M 2010 are as follows:

Access and Use	M1	Adequate provision shall be made for people to access and use a building, its facilities and its environs.
Application of the Part	M2	Adequate provision shall be made for people to approach and access an extension to a building.
	M3	If sanitary facilities are provided in a building that is to be extended, adequate sanitary facilities shall be provided for people within the extension.
	M4	Part M does not apply to works in connection with extensions to and material alterations of existing dwellings, provided that such works do not create a new dwelling.

Figure 1 The requirements of Part M (2010) of the Building Regulations

TGD M 2010 provides guidance in relation to meeting the requirements of Part M of the Second Schedule to the Regulations and focuses on Access and Use. It is important to note that the introduction of TGD M 2010 states:

“The materials, methods of construction, standards and other specifications (including technical specifications) which are referred to in this document are those which are likely to be suitable for the purposes of the Regulations. Where works are carried out in accordance with the guidance in this document, this will, prima facie, indicate compliance with Part M of the Second Schedule to the Building Regulations (as amended). However, the adoption of an approach other than that outlined in the guidance is not precluded provided that the relevant requirements of the Regulations are complied with. Those involved in the design and construction of a building may be required by the relevant building control authority to provide such evidence as is necessary to establish that the requirements of the Building Regulations are being complied with”.

O’Connell Mahon Architects are satisfied that the proposed development will meet the requirements of Part M of the Second Schedule of the Building Regulations.

3 References/Bibliography

1. DEHLG (2010) Building Regulation, 2010 Technical Guidance Document M. Disability Access. Department of Environment, Heritage and Local Government, Dublin.
2. WCC Development Plan 2022-2028