



RIALTO STUDENT ACCOMODATION

BUILDING SERVICE APPRAISAL

STUDENT ACCOMODATION DEVELOPMENT

South Circular Road
Rialto
Dublin

ShipseBarry

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	1	2	3	4	5	6.1
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Architects Shipsey-Barry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planning consultants Tom Philips	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Structural engineer MMOS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quantity surveyor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issue 1 : Planning stage information

ING Gerard (Craig) van Deventer CEng., BE(mech)., HDip CIOB, MCIBSE

M : [00] 353 (0)87 260 8080

E : gerard@dkpartnership.com

70 Main Street, Applewood , Swords, Co.Dublin, Ireland
 Reen Kenmare Co. Kerry

post@dkpartnership.com
www.dkpartnership.com

T : [00] 353 (0)1813 1930

T : [00] 353 (0)64664 1686



Contents.

section		Page
1	Introduction	4
2	Servicing of development	5
3	Servicing of apartment	7
4	Compliance requirements	9



1.1 Introduction.

This document is a high level summary of the building services proposals.

1.2 Introduction.

DK partnership (DKP) have been commissioned to issue a building services appraisal for the proposed development.

1.3 Development details.

This report is in lieu of proposed student accommodation development located in South Circular Road, Rialto Dublin and consists of 314 student rooms with 319 bed spaces and other social spaces spread over 7 floors including a basement level.

There are no student rooms proposed in the basement.

2.1 General approach..

As the majority of the area is taken up by student apartments the general servicing of the block will be directed by these area's. Student apartment typically have 6 to 12 individual separate student rooms complete with bed, computer/study desk and en-suite.

The students apartments are generally leased / rented as a single block by a local authority, a student housing association, college, university or private entity.

As a rule these organisations rent the student room to an individual student on a pro rata basis and only meter the energy usage of a single apartment rather than the usage per student room.

This approach directs the heating/hot-water, cold water, telecommunications and electricity supply to be communal system based i.e. A single (bulk) utility supply/meter from an external provider to be distributed via a common strum to the individual apartments.

Most organisations will use the meter readings from an apartment to establish a pro-rate (energy) cost by dividing the usage by the occupied rooms.

2.2 Power / electricity.

The electricity to the blocks and apartments is provided by a communal electricity distribution system fed by a single electricity bulk supply and metered by a single utility meter from a national grid provider.

Blocks and apartments are separately metered (client meters) with the meter readings digitally copied to a central PC via a profibus service for record keeping or invoicing.

Additionally individual student rooms can be metered separately but this is not included at the moment and will add to the to the construction cost.

2.3 Heating and hot water.

The space & hot-water heating to the blocks and apartments is provided by a communal heating distribution system fed by a single mains gas bulk supply and metered by a single utility meter from a national grid provider. Blocks and apartments are separately metered (client meters) with the meter readings digitally copied to a central PC via a profibus service for record keeping or invoicing.

Additionally individual student rooms can be metered separately but this is not included at the moment and will add to the to the construction cost.

2.4 Cold water.

The cold water to the blocks and apartments is provided by a communal water distribution system fed by a single water bulk supply and metered by a single utility meter from a national grid provider.

Blocks and apartments are separately metered (client meters) with the meter readings digitally copied to a central PC via a profibus service for record keeping or invoicing.

Additionally individual student rooms can be metered separately but this is not included at the moment and will add to the to the construction cost.

2.5 Cooling.

Cooling has not been applied except for any central server room if this is located internally without access to an external wall. A air source chiller refrigerant system is proposed to cater for this.

2.6 Telecommunications and TV.

Data/Broadband, TV/Satellite is provided by a communal ICT (fibre) distribution system fed by a broadband supplier(s), a cable TV provider, on-site terrestrial aerials, on-site satellite dishes and/or the college ICT network. Proposed is a 5 wire fibre back bone wire for the Integrated Reception System (IRS) to allow apartment occupiers have access to Sky TV, cable TV, FM radio, digital broad cast etc with typical providers to be Eir, Virgin, BT, BskyB etc. Typical services are ; FM radio, Digital audio broadcasts (DAB), Analogue and digital terrestrial TV (DTT), BskyB digital satellite TV, Analogue and digital broadcasts from other satellites, CCTV relayed as UHF TV channels and local (college) TV channels.

2.7 Renewable energy (be green).

There may be a requirement to provide renewable energy to the development as directed by Part L or indeed as an incentive to lower the common areas energy usage cost.

The extent is related to the Part L to be applied.

Renewable energy can be applied in the form photovoltaic, combined heat & power and heat pumps.

A new review to be executed taking in account Part L 2018 (domestic) and part L 2017 (commercial)

2.8 Access control.

Access control for apartment blocks or block cores is by means of digital key code or proximity card.

Individual student apartments and apartment student rooms are accessed by means of standard mechanical key operated locks.

The access control system is remotely assessable via broadband or web for access card/fob programming.

2.9 CCTV.

CCTV is applied generally covering the common and common circulation areas where observation is deemed to be desirable.

The CCTV system is remotely assessable via broadband or web for recording or observation.



3.1 Power electricity..

Each apartment is provided with an individual client metered single phase supply.

3.2 Space heating / hot-water heating.

Each apartment is provided with a client metered low pressure hot water heating system with radiators and a common hot water cylinder fed by the communal heating system.

Room radiators have thermostatic radiator valves (TVR) for individual room temperature control.

Hot-water has thermostatic temperature control.

Local programmer for space heating and hot-water times with central over-ride facility.

3.3 Space cooling. Not proposed.**3.4 Cold water.**

Each apartment is provided by a client metered cold (potable) water supply fed from the communal water system.

3.5 Hot water.

Each apartment is provided with hot water via the common hot-water storage tank (calorifier) fed from the communal heating system with a capacity to cater for simultaneous use showers in the apartment.

3.6 Cooking.

In common kitchen : Electric oven and electric hob.

3.7 Telecommunications and TV.

A 5 wire fibre back bone wire to each apartment and distributed to each student room and communal living room / kitchen via a coax and Cat 6 service for the Integrated Reception System (IRS) to for access to a central data system, Sky TV, cable TV, FM radio, digital broad casts etc.

3.8 Ventilation.

Student rooms :

Humidity controlled permanent back ground ventilation in each student room (7,000mm²)

Humidity controlled intermittent mechanical extract from student bed room and light switch controlled intermittent mechanical extract from en-suite. (15l/s)

Purge ventilation to each habitable space. Openings with permanent restrictors are calculated with the restricted opening.

Kitchen/Dining/Living room : Openable area to be 5% of floor area.

Humidity controlled permanent back ground ventilation. Kitchen 3,500mm², Living/dining : 7,000mm²

Manual controlled kitchen (cooker hood) extract ventilation. 30l/s

Purge ventilation to each habitable space. Openings with permanent restrictors are calculated with the restricted opening. openable area to be 5% of floor area.

3.9 Typical student room accessories.

1 no double 13A socket	Bed side	Power
1 no double 13A socket	Under or over desk	Power
1 no coax + cat 6 outlet	Under or over desk	TV/satellite/broadband/Data
1 no two gang switch	Entrance door	Light switch for bathroom and two way switch for student room light
1 no one gang switch	Bed side	Two way switch for student room light
1 no student room light	Enclosed PVC	light fitting with 4W LED filament
1 no bathroom light	Enclosed IP56 PVC	light fitting with 4W LED filament
1 no extract fan isolator	Entrance door at high level	Maintenance isolator
1 no double panel radiator	External wall	Heat energy controlled by thermostatic radiator valve

3.10 Typical apartment common areas accessories.

4 no double 13A socket	Over counter top kitchen	
2 no single 13A socket	Under counter top kitchen	
1 no single 13A socket	Kitchen - general	
1 no single 13A socket	Living - general	
1 no single 13A socket	Corridor - general	
2 no double 13A socket	TV location	
1 no coax + cat 6 outlet	TV location	
1 no two gang switch	Entrance door	Light switch for living area, Light switch for kitchen area
2 no living area light	Enclosed PVC	light fitting with 4W LED filament
2 no kitchen area light	Enclosed PVC	light fitting with 4W LED filament
1 no oven isolator	Over counter top kitchen	
1 no hob isolator	Over counter top kitchen	
1 no single 13A socket	Cooker hood	
x no one gang switch	Corridor	One, two, intermediate switching for corridors/entrance
x no corridor light	Enclosed PVC	light fitting with 4W LED filament
1 no indirect calorifier	Stainless steel calorifier	to suit 100% student shower demand at peak times.
x Radiators	Living, kitchen and corridor	LPHW system radiators with TVR
1 no programmer	Space and water heating programmer	with external over ride.

4.1 Part L compliance.

None residential Part L for all.

4.2 Part L transitional periods. Times.**None residential :**

Part L status. **Current** : Part L 2008,

New : Part L 2017B2) **Transitional period**

Part L **2017** : Applies to all works commencing after 31-12-2018.

Part L **2008** : Can be applied if: The work commences before 31-12-2018 or where planning permission has been applied for before 31-12-2018 and substantial works will be completed by 31-12-2019. (substantial=all external wall erected/completed).

See energy statement for further details.

