Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

EMPLOYER'S REQUIREMENTS

FOR

PROVISION OF HOUSING UNITS

IN

DUBLIN CITY COUNCIL'S ADMINISTRATIVE AREA

FOR

DUBLIN CITY COUNCIL

SECTION 1

OUTLINE PROJECT AND SCOPE OF WORK

1. OUTLINE OF PROJECT AND SCOPE OF WORK

1.1 Introduction

The purpose of this document is to communicate the Employer's Requirements in respect of the provision of New Housing Units for Dublin City Council lands within Dublin City Council's Administrative Area on a number of separate project sites.

This document may be subject to amendment, and the final version together with any additional information will be issued to shortlisted applicants at Stage 2.

Dublin City Council Housing department requires the provision of new, quality housing units which must:

- Deliver quality living accommodation for families in the form of three bedroom, 5 person, 2 storey houses, and two bedroom, 4 person, 2 storey terraced houses, and one bedroom, 2 person 2 storey, and single storey houses which will sit comfortably in context with the surrounding existing housing.
- Be of robust permanent construction and have a life span of 60 & 25 Years as set out below in section 2.9: Design Life.
- Be constructed of suitable quality materials to ensure maintenance requirements are minimised over time and take into account Dublin City Council's requirements set out in Section 2: Housing Requirements.
- Be constructed with a concrete ground floor to each house, which complies with the Building Regulations (see below).
- Conform to all relevant Department of Environment standards and codes of practice applicable to current housing development.
- Be designed and constructed in accordance with all applicable Irish Building Regulations, codes and standards, and the requirements of the Building Control (Amendment) Regulations 2013-2015.

Building Regulations 1997-2017 (SI 497 of 1997 as amended – refer to www.environ.ie for latest)
Part A –Structure - 2012
Part B – Fire Safety - 2017
Part C – Site preparation and resistance to moisture - 2004
Part D – Materials and workmanship - 2013
Part E – Sound -2014
Part F –Ventilation - 2009
Part G – Hygiene - 2008
Part H – Drainage and wastewater disposal – 2016
Part J – Heat producing appliances – 2014

Part K – Stairways, ladders, ramps and guards – 2014
Part L – Conservation of fuel and energy - dwellings - 2011
Part M – Access and use - 2010

- Meet any additional requirements which exceed the Building Regulations and DECLG Best Practice Guidelines, in order to comply with the provisions of the Dublin City Development Plan, 2016-2022, and as listed in Section 2 – Housing Requirements, of this document.

- Be certified as fully compliant with all applicable Irish Building Regulations, statutory codes of practice and other requirements as set out in the tender documents on completion of the development by the Assigned Certifier and the Builder in accordance with the Building Control (Amendment) Regulations (S.I. No. 9 of 2014, S.I. No. 243 of 2015, and those in force at the time of entering into contract).

The above criteria must inform the Developer's approach to the completed development and the individual housing units, and are core objectives of the delivery of the New Housing Units to be provided on these projects.

This document contains performance specifications for the new housing units and the various elements which combine to form a modern sustainable and liveable home for the long term.

The Room Data sheets collectively set out the requirements of the Employer of how the Houses are to be designed, constructed, and finished. It should be noted that Room Data Sheets will be issued at Stage 2 to shortlisted applicants.

1.2 Programme

The successful applicant must be in a position to deliver the project/s to a programme which must be submitted at Stage II by the shortlisted developers, and which may form part of the marking process.

1.3 Location of Site

The sites identified in this competition for the provision of new Housing Units (including a Social Housing element) are within Dublin City Council's Administrative Area.

This contract is for the provision of the New Social Housing Units and all associated site works only. The schematic plans, which are included in this invitation to tender are indicative and are for information purposes only.

Roads and streets, which define the boundaries of the subject sites for development will contain services e.g. water, foul and surface water drainage, gas, electricity, telecoms etc. Details of all existing services (where available) will be provided in Stage 2 documentation for shortlisted applicants for the Works Contract.

1.4 Scope of works

The Developer's scope of work for the project is as follows:

The Developer must:

- Provide a full design team that will design and certify the entire project in accordance with the provisions of the Building Control Amendment Regulations 2013-2017
- Design and install suitable foundations with service connections, insulation, radon and damp protection, etc. in accordance with the Irish Building Regulations, as required.
- Design and install concrete ground floor slabs.
- Erect the superstructure for the houses.
- Complete the external and internal finishes.
- Complete all mechanical and electrical installations in accordance with the relevant service providers' standard requirements and Codes of Practice, and arrange and deliver connections to all necessary utilities in accordance with the Irish Building Regulations.
- Install all bathroom and kitchen fittings and finishes and ensure all services are properly and safely completed and commissioned in accordance with the requirements of Irish Water and the Irish Building Regulations.
- Provide any and all roads, paths, paving etc., contained within the site boundary of the site to the appropriate Dublin City Council and NRA Road standards.
- Ensure that all testing is completed and fully certified by installers and testers on completion of testing.
- Provide all required testing Certificates to the Assigned Certifier as works and testing progress.
- Complete external public and private open spaces and services within the curtilage of the houses including boundary treatments and landscaping in accordance with the Planning Permission for the development.
- Certify and complete the project in accordance with the new Building Control (Amendment) Regulations 2013-2017.
- Hand over completed housing units fit for permanent habitation.

The Developer will be required to complete all necessary works, including but not restricted to the construction of such roads, paths, paving and external works, utilities, services, etc. as may be required to facilitate this development as set out in the Stage II (Invitation to Tender) documentation.

1.5 Certification & Documentation

The Developer must provide sufficient documentation to verify that all residential units within the development conform to the requirements and intent of these Employer's Requirements.

Sufficient information must also be given to demonstrate how the following can be achieved:

- Identification of Materials & Products used in Developer's Design & Construction of the proposed Housing Development

- How operation, maintenance, cleaning, and replacement of the materials, finishes, and systems contained within the development can be undertaken.

Prior to entering into contract, the Developer must submit a document schedule listing the specific documents it proposes to provide to meet these requirements.

This document schedule must include document numbers, title and proposed submission date. All documents must be produced in a timely manner, and at the latest, prior to handover.

All documentation must be in English.

S.I. units must be used in all cases.

1.6 SAFETY FILE

The following is a non-exhaustive list of items to be included in the Health & Safety File on completion of the dwellings, and all items on this list must be included as a minimum standard for the Health & Safety File which shall be submitted in both hard and soft copy versions to Dublin City Council on completion of the Social Housing development:

- A complete set of Architect's as built drawings including site plans, plans, sections, elevations, details, etc;

- A complete set of Civil & Structural Engineers as built drawings including plans, sections, elevations, details, etc;

- A complete set of Mechanical as built drawings for the dwellings, including pipe layouts, sizes, positions etc., including full technical details, manufacturer details, photographic location details of all components which comprise the system, and including maintenance requirements for the system and components;

- A complete set of Electrical as built drawings for the dwellings, including panel layouts, wiring runs, cable tray details & positions, light, socket, switch positions, any special systems, etc., including full technical details, manufacturer details, photographic location details of all components which comprise the system, and including maintenance requirements for the system and components;

- A complete set of Mechanical Ventilation / Air Conditioning as built drawings, including all details of boiler layouts, pump positions, valve

details, pipe layouts, insulation materials and details, radiator positions & details, etc. etc;

- Full technical details, manufacturer details, photographic location details of all components which comprise the Mechanical Ventilation system, including maintenance requirements for the system, components, filters, etc.;

- A complete set of Hot & Cold Water system as built drawings, showing pipe runs, insulation materials, valve positions, water pump details & positions, electrical connections, storage tanks and cisterns, overflow pipe positions, expansion vessel locations, etc;

- Full technical details, manufacturer details, photographic location details of all components which comprise the Hot & Cold Water system, including maintenance requirements for the system and components;

- A complete set of Heating system as built drawings, showing pipe runs, insulation materials, valve positions, water pump details, radiator positions, electrical connections, pressure vessels, storage tanks, blow down valves, overflow pipe positions, expansion vessel locations, etc;

- Full technical details, manufacturer details, photographic location details of all components which comprise the Heating System, including maintenance requirements for the system and components;

- A complete set of security wiring system as built drawings showing alarm panel location, keypad location, contact / sensor locations, etc. etc., including full technical details, manufacturer details, photographic location details of all components which comprise the system, and including maintenance requirements for the system and components;

- A complete set of Fire, CO detection, smoke / heat detectors & alarm system as built drawings showing alarm panel location, detector locations, etc. etc., including full technical details, manufacturer details, photographic location details of all components which comprise the system, and including maintenance requirements for the system and components;

- Fully detailed technical literature for all sanitary ware to include full technical information, drawings & details, material details, etc.

- Installation, test and completion certificates for all pipe work, wiring, systems, plant and equipment installed in the building;

- Maintenance procedures and schedules for the building & its systems, plant and equipment;

- Operation manuals / procedures for the systems, plant and equipment installed in the building, and emergency procedures for shutting down suspect installations in the building;

- Operation / maintenance manuals for all components in the building;

- Full details of all systems, plant and equipment installers & maintenance contact names and telephone numbers including 24 hr. callout numbers in case of emergencies;

- Full details of any hazardous materials present in the building, the locations of same, and methods for safely working in those areas;

- Full details of any confined spaces in the building, along with method statements / and safe working procedures for working on maintenance in those areas;

- Full details of any areas of high risk in terms of maintenance in the building, e.g. working at height, flat roof repairs & maintenance, etc. etc., and method statements / safe working procedures for working on maintenance in those locations.

1.7 Building Regulations – Minimum Requirements

Building Regulations: The Irish Building Regulations will apply in full to the proposed development as listed in the table below:

Building Regulations 1997-2017 (SI 497 of 1997 as amended – refer to www.environ.ie for latest)
Part A –Structure - 2012
Part B – Fire Safety – 2017 – Volumes 1 & 2
Part C – Site preparation and resistance to moisture - 2004
Part D – Materials and workmanship - 2013
Part E – Sound -2014
Part F –Ventilation - 2009
Part G – Hygiene - 2008
Part H – Drainage and wastewater disposal - 2016
Part J – Heat producing appliances - 2014
Part K – Stairways, ladders, ramps and guards -2014
Part L – Conservation of fuel and energy - dwellings - 2011
Part M – Access and use - 2010

The full requirements of the Building Control (Amendment) Regulations 2013 – 2017 will also be applicable.

For products or systems that do not fall within the scope of existing standards, or deviate from established norms, third party certification must be used to demonstrate compliance with the Irish Building Regulations.

The Developer must comply with all relevant & applicable EN Standards & Codes of Practice, Irish Standards and British Standards (or equivalent) are applicable where no equivalent EN standard exists.

All Local Authority Codes of Practice are applicable, along with all statutory regulations appropriate to the provision of Housing.

All Codes of practice, standards, and requirements of the statutory service providers (ESBN, GBN, Irish Water, Dublin City Council, Eir, etc.) are applicable in full to the development.

1.8 Risk Assessment

The Developer shall prepare and issue to the Client / City Architect's Representative a full risk assessment for the completed housing units and the overall development detailing all risks to maintenance personnel, confined spaces, access to maintenance and working areas, emergency evacuation procedures etc.

The Risk Assessment document must set out clearly particular hazards which remain and will affect the maintenance of the Houses being provided to Dublin City Council, on an ongoing basis, along with details of what safety procedures have been considered as appropriate in order to reduce, or eliminate those risks as identified.

SECTION 2

HOUSING REQUIREMENTS

2. HOUSING REQUIREMENTS

2.1 General

The units must comply with the Building Regulations and other statutory approvals as noted above. These houses are to be included in Dublin City Council's standard housing stock. All requirements as set out in this section must be included in the Developer's proposals.

The quality of the overall design is very important in the long term regarding the maintenance and management of the development but also in the interests of the residents and the quality of the environment that they will be living in.

Kitchen, Dining and Living room areas should be designed to have as much natural light incorporated into the design as possible and take into account the orientation of the sun in relation to the main living rooms.

The materials used must be robust and durable but also create a pleasant place to live for the residents. They should be made from sustainable and/or renewable resources and not present a health risk for the residents.

N.B. Developers may propose alternative materials & products where they have established and developed standard manufacturing methods, tested, and approved systems and / or products which have third party approval or certification.

Please find below more detail in relation to the performance specification for this development. Room Data Sheets will be provided at Stage II of the procurement process giving further information and details of the above. These should be read in conjunction with the employers requirements.

The Developer should note that the Room Data Sheets represent Dublin City Council's minimum requirements and the Developer must also allow for the adequate and safe provision of circulation, electrical / mechanical plant space, and access for maintenance of all services to all apartments units throughout the development including all building services.

2.2 Site Development Works:

The site development must include for the following for each house, (please note, this section should be read in conjunction with the civil engineering specification and documentation as issued at stage II of this competition):

- Landscaping and planting of open space to be prepared by a qualified Landscape Architect employed by the Developer.
- Topsoil and seeding to all private open space / rear gardens throughout the development
- 2000mm high boundary walls / robust fencing to all rear of house boundaries.
- Paving, paths and topsoil and seeding to all gardens to be in accordance with Landscape Architects design proposal as included in the statutory Planning Submission.

- Any railings proposed shall be a minimum of 1200mm high painted galvanised steel post and bar railings throughout with a minimum bar size of 10mm solid mild steel.

- 1200mm high steel post and bar railing on brick / concrete plinth walls, with 100x100mm galvanised steel gate posts to take galvanised steel garden gates with a minimum bar size of 10mm solid mild steel.

- Minimum 150mm deep x 1200mm wide reinforced concrete paved apron to entire width of house at rear.

- Minimum 150mm deep x 1200mm wide concrete paved apron to entire width of house to front

- A minimum 150mm deep x 3000mm wide x 5000mm hard paved area to front of house to allow for car parking space for individual parking areas within curtilege or shared parking areas provided in accordance with current Dublin City Council Development Plan, and the Greater Dublin Sustainable Drainage Standard

- Surface water drainage outlet and connection to rear of each house & Mains surface drainage to Greater Dublin Sustainable Drainage Standards

- Surface water drainage outlet and connection to front of each house & Mains surface drainage to Greater Dublin Sustainable Drainage standards

2.3 Plan Form & Shape

The plan form and shape of the Houses must take account of Dublin City Council's preferred requirements regarding unit mix and numbers of each house type required.

Bathrooms, kitchens and toilets should be located adjacent to each other, insofar as is practicable.

There shall be no exposed or boxing out of exposed mechanical and electrical plant/equipment in any room or area at any level.

All service pipes and conduits shall be sully concealed within floors, ceilings, and partition walls.

2.4 Headcount

Each four bedroom house will cater for a total of seven persons.

Each three bedroom house will cater for a total of five persons.

Each two bedroom house will cater for a total of four persons.

Each one bedroom house will cater for a total of two persons

Cold & Hot water services to each dwelling must be sufficient to accommodate a minimum of three visitors per day.

2.5 Critical Dimensions

The overall dimensions for services and structural zones must be designed to accommodate the structural frame and the extent of services to be provided. Moreover, adequate provision must be made for future flexibility in terms of use or occupation over the life of the building.

The Minimum finished floor to ceiling height must be no less than 2.4m to ground floor and first floor rooms throughout all dwellings.

The finished floor to ceiling height to the "visitable" ground floor WC must have 2.4m over at least 50% of the floor area, with an absolute minimum headroom of 2.1m in any location within the WC area.

All room dimensions must comply with the requirements as set out in the DECLG best practice Guideline 'Quality Housing for Sustainable Communities' – Published 2007, and in accordance with Clause **16.10.2 Residential Quality Standards – Houses** of the Dublin City Development Plan 2016-2022.

2.6 Acoustics

The buildings must be designed to control flanking noise and noise transmission through the Party walls and external walls as per the requirements of the Technical Guidance Document for Part E (Sound – 2014) of the current Irish Building Regulations.

Care must be taken in detailing party walls to minimise transmission of mechanical noises through existing structures.

Transmission of noise from building services and equipment noise, noise transfer (within dwellings) between the various spaces must be attenuated.

Please see Room Data sheets for further detailed information regarding acoustic requirements in each area.

2.7 Sustainability

The houses must achieve a minimum of an A3 BER Rating, and be in compliance with Part L (Conservation of fuel and energy – Dwellings – 2011) of the current Irish Building Regulations. In addition to this standard, the houses must be designed for low maintenance with ease of maintenance being a key requirement. Whole life costs must also be borne in mind when selecting design solutions. Issues to be considered include but are not limited to:

- The Developer shall ensure that a BER Certificate is provided for each unit upon completion, confirming that the unit as constructed achieves a minimum A3 rating.
- Overall extent and quantity of insulation standards and other energy-saving design features;
- Automatic temperature and lighting controls;
- Water conservation;
- Use of durable Sustainable and/or renewable materials is a requirement

- The use of non-renewable materials is to be avoided where possible;
- Flexibility in design for adaptation & extension
- The building service systems must provide and maintain a comfortable indoor environment with minimum adverse impact on the environment with optimum whole life costs.

2.8 Future Expansion

The completed building shall be capable of being extended by the addition of a single storey extension to the rear of the building.

Additionally, heating plant shall have the capacity to accommodate a 20 Sq. M. extension to the building, with pipe work adequately sized to carry the services for extension to a defined connection point to the rear of the house.

2.9 Design Life

The buildings must be designed and constructed using materials, systems and components with a minimum life as set out below from Substantial Completion (exceptions listed hereunder) given that normal maintenance will be carried out and fair wear and tear accepted.

Element	**Minimum Required Lifespan**
Structural elements	*60 years*
Floors, Walls, Roofs & Ceilings	*60 years*
HVAC & Mechanical Services	*25 years*
Electrical Services	*25 years*

Note Where proprietary materials or systems are mentioned in the accompanying performance specifications or data sheets it shall be the Developer's responsibility to assess such materials and systems and select only those materials and systems which achieve the minimum life spans set out above.

Please note that the information provided below in sections 2.10 – 2.25 is issued for information only, and a full specification shall be provided to the shortlisted parties with the stage II documentation.

2.10 External Finishes

The external dwelling finishes must be durable, robust, and selected to reflect Dublin City Council Requirements as set out in 1.1 above. Materials will be sympathetic to existing surrounding housing finishes.

All major finishing materials and finishes including colour selection to be indicated in the Developer's Proposals and agreed with the Dublin City Council City Architect's Representative in entirety prior to commencement of works.

All materials shall be selected to reflect the overall quality of the development, design life and ease of maintenance as set out above.

Additional performance specifications will be issued during the second stage of the procurement process. All external materials and finishes must be fire resistant and in accordance with the requirement of the Irish Building Regulations.

2.11 Glazing & External Doors

External glazing throughout must be of a proprietary triple glazed superior quality thermally broken glazing system designed, built and installed to latest relevant European standards, Codes of Practice, and installed in accordance with the Manufacturers requirements and recommendations. Whole frame U value of 0.8W/m2K will be required for all windows and external doors

All glazing must be internally beaded/secured.

External doors must be "High security" impact resistant timber hall doors to EN 1627, with level access threshold, & 5 point locking system. Architraves to external doors must be of 100x19mm hardwood detailed to match architraves to internal doors.

A Manufacturer's Thermal Performance Certificate will be required for each window type in each house type throughout the development for inclusion with the BCAR information and Certification process, and shall be included in the Health & Safety file to be handed over at Substantial Completion stage or the project prior to occupation of the development.

Timber framed windows are preferred where cavity closers are employed to provide fire protection to the wall cavities.

PVC windows cannot be used.

2.12 Roofs

The roof must be of proprietary concrete tile / natural slate / clay tiling / etc. non combustible material, screw fixed to timber battens on vapour permeable roofing underlay, on timber / steel roof structure to a suitable roof pitch to meet with tile / slate manufacturers requirements and recommendations.

Party walls must be sealed to underside of roof finish with suitable fire resistant sealant to provide smoke-tight joint preventing smoke and fire infiltration from house to house across party walls.

All facia, soffits and rainwater goods must be finished in minimum 0.7mm gauge powder coated aluminium.

PVC is not acceptable as a fascia or soffit material for finishing around roofs.

All timber used for roof construction must be pressure preservative impregnated to EN standards.

2.13 Building & Street Identification Signage

The Developer shall include external numbering to each house to identify postal locations, along with signage for the housing scheme which shall be of individual lettering to include Dublin City Council logo on a steel plate fixed to steel posts, or solid brick / blockwork walls similar to the existing signage to streets in the vicinity, in accordance with "Construction Standards for Road & Street Works in Dublin City Council".

2.14 Internal Materials & Finishes

The internal materials and finishes must be selected to reflect Dublin City Council's Employer's Requirements as set out in 1.1 above. All major finishing materials and finishes including colour selection must be indicated in the Developer's Proposals and agreed with the Dublin City Council Housing City Architect's Representative. Material must be selected to reflect the overall high quality of the development, design life and ease of maintenance.

Refer to Room Data Sheets for further details. Additional performance specifications will be issued during the second stage of the procurement process.

2.15 Floors

The Ground floors to the Housing units must be of concrete. All ground floor construction must include a moisture and radon barrier, thermal insulation, and be detailed to avoid thermal bridges.

Floors as constructed, must achieve compliance with the current Irish Building Regulations and Technical Guidance Documents, as Listed in the table at Section 1.6 above.

2.16 2.16.A – Internal (Non-party) Walls

Internal partition walls must be insulated timber / metal stud partitions with minimum 12.5mm Moisture Resistant or Fire Resistant plasterboard / etc. boards each side with filled and taped joints – such walls to span from top of structural slab to structural soffit.

All jointing, external / internal corners, etc., to be smooth finished.

Internal partitions generally to be finished with 3 no coats of selected colour emulsion paint finish, and fitted with minimum 125x19mm solid timber skirting boards mechanically fixed to partition studs, and filled, primed, undercoated, and gloss paint finished on completion throughout.

MDF or PVC skirtings cannot be used.

All partition walls to wet areas such as kitchens, bathrooms and toilets must be lined with 12.5mm Moisture resistant plasterboard / etc. boards finished in accordance with relevant Room Data Sheets.

2.16.B – Party Walls

All party (Compartment) walls must be so designed and constructed as to achieve compliance with Part B – Fire of the current Irish Building Regulations and Technical Guidance Documents as listed in section 1.6 above.

2.17 Internal Doors and Screens

All internal doors must be solid core flush doors with hardwood lipping and vision panels where required by Building Regulations and in all circulation areas.

Any fire rated door sets must be fitted with mechanical self closing devices, and bear the manufacturer's "Fire Door" tags, along with "Fire door keep shut" tags fitted.

All doors must have three no. 100mm satin finished stainless steel ball bearing hinges, with brushed stainless steel lever handles on roses & escutcheon plates to both sides.

Two lever mortice locks must be used on all internal doors throughout.

Five lever mortice locks / five point security locking must be employed to all external doors.

All internal door sets must be installed / constructed to allow for full width architraves (100mm) to each side. All architraves to be ex 100 x19mm solid timber with chamfered leading edges.

All internal doors must be paint finished including base coat / primer, undercoat and final satin coat painted on completion, or three coat clearcoat finish to Developers proposals.

2.18 Ceilings

All suspended ceilings to houses must be of 12.5mm plasterboard with filled and taped joints and three coats of emulsion paint throughout in accordance with specification.

All board joints must be fully scrim taped with 75mm wide scrim tape, and filled and sanded prior to finishing with 3 no coats of selected colour emulsion paint.

Recessed downlighter light fittings should not be used.

2.19 Bathroom / Toilet Facilities

Sanitary Ware & Fittings - A matching suite of ceramic Wash Hand basin, quality ceramic low level close couple suite with integral cistern, dual flush, and back to wall – concealing the soil pipe connection / multiwick at back of floor mounted w.c. pan, a 750mm wide by 1800mm acrylic bath (not fibreglass) with fixed side and end panels to match.

Adequate & visitable WC facilities must be provided at ground floor level for persons with disabilities and be so designed and constructed as to achieve compliance with Parts M & G of the current Irish building regulations as listed at section 1.7 above.

All wall construction for timber/steel stud framing layout of ground floor to provide suitable grounds for fitting of W.C., WHB, towel radiator, etc., and for future fixing of support handrails, folding rails, etc. for disabled assistance in W.C. area.

2.20 Internal Staircases

All internal staircases must be of solid timber, or timber-faced steel construction.

Entire staircase must be finished with three coats clear satin varnish, and sanded between each coat to provide smooth blemish free finish on completion.

The Rise of each step must be consistent throughout rise of staircase, and shall conform with Part K and Part M of the Building Regulations TGD's.

The Going of each step must be consistent throughout the staircase, and shall conform with Part K and Part M of the Building Regulations TGD's.

Optimum rise of 175mm, and going of 250mm should be considered wherever possible.

Minimum headroom throughout staircase must be 2000mm.

MDF or plywood cannot be used in staircases.

2.21 Mechanical Installations

The houses must be fitted with standard hot / cold water services including cold water storage tank, calorifier (hot water cylinder), isolation valves, non return valves, taps, and all necessary hot and cold supply pipe work throughout.

All water services installations must comply with the technical requirements and details of Irish Water Code of Practice.

Hot & Cold water supplies must be provided to bathroom, downstairs W.C. and wash hand basin, kitchen including sink, washing machine & dishwasher. Washing machine and dishwasher water outlets must be fitted with shut off valves to direct connection of supply pipes to white goods.

All pipe work must be copper, and must be concealed within timber / metal stud partitions, floors and ceilings.

Additional performance specifications may be issued at Stage II of the procurement process.

Visible boxing out of services outside of partition walls, ceilings or floors is not permitted.

All service routes must be accommodated within internal partitions, ceilings and floor voids.

Fire resistant construction to party walls must be imperforate, as per Section 2.16.B above.

Any services which are required to party wall side of houses must be run in battened out services zone with plasterboard slab to housing unit side of party wall.

The Heating System to each house must be of high efficiency condensing gas fired boilers. Room sealed appliances to be used only, and must be located on external walls to allow balanced flue intake / extract discharge in accordance with the manufacturer's requirements, and relevant RGI Codes of Practice.

The gas fired heating system must be capable of providing adequate heat for space heating and water heating to the entire house as set out in the Mechanical specification, and must have adequate spare capacity to take future expansion of the house by 40 Sq. M.

Each gas boiler must be accompanied with carbon monoxide detector and alarm, interlinked to boiler electrical supply to BGE requirements.

Mechanical extract ventilation must be provided above cooker area located in the kitchen.

Mechanical ventilation will be required to all internal W.C. / bathroom / en suites located in inner locations. Additional mechanical ventilation may be required in order to comply with the overall ventilation requirement for the house. This needs to be coordinated with the air-tightness strategy for the house.

Details of the ventilation strategy are to be agreed with Dublin City Council relevant Mechanical, Electrical, and City Architect's Representative prior to commencement of works on the houses.

2.22 Electrical Installations

Include for incoming mains, power distribution circuits, lighting distribution circuits, etc.

The Developer must ensure that an individual metered electricity supply is delivered to each house on Substantial Completion of the development prior to handover of the Housing units to Dublin City Council.

General power requirements including electrical power outlets in each room must be in accordance with the Room Data Sheets to be issued with Stage II documentation.

Electrical switches, sockets, power outlets, data / telecom outlets, cover plates, etc., to all houses must be of switched, brushed stainless steel.

Entire electrical installation, wiring, panels meters, etc., must be completed in accordance with the requirements of the ETCI, and RECI standards.

Additional performance specifications may be issued at Stage II of the procurement process.

Mains wired smoke / heat detector must be suitably located in the kitchen / dining area in accordance with Building Regulations Part B - Volume 2.

Mains wired smoke detector must be suitably located in the hall & landing areas.

All wiring throughout the house must be contained in galvanised steel conduit.

Visible boxing out of services outside of partition walls, ceilings or floors is not permitted.

All electrical service routes must be contained in steel conduit throughout, and must be accommodated within internal partitions, ceiling and floor voids.

Fire resistant construction to party walls must be imperforate.

Any services which are required to party wall side of houses must be run in battened out services zone with plasterboard slab to housing unit side of party wall.

Electrical system to every house must be fully earthed, with earth rod location clearly identified with coloured junction box.

Electrical panel must be located at high level to hallway with all circuits clearly marked and identified.

Electrical meter cabinet must be located to the front of each house on a fin wall, and contained in an ESBN standard meter cabinet, securely fitted and fixed.

2.23 Gas Installations

Heating systems must be gas fired. The Developer must ensure that a natural gas supply is delivered to each house on Substantial Completion of the development prior to handover of the Housing units to Dublin City Council.

Gas installations must be fitted, tested, completed and commissioned in accordance with the requirements of RGI and Bord Gais, and Certified as compliance by an RGI registered installer prior to connection to the Bord Gais network.

A recessed gas meter cabinet must be located to the front of each house on a fin wall, and contained in an Bord Gais (BGE) standard meter cabinet, securely fitted and fixed.

2.24 Photovoltaic Panel Installations

The Developer must ensure that all photovoltaic panel installations as designed to provide alternative energy requirements to Part L of the Building Regulations, are fully isolatable by the installation of an isolation switch at or near the dwelling entrance – in the vicinity of the meter cabinet.

The PV Isolator Switch is required to facilitate the Fire Brigade in isolation of the PV output from the dwelling mains wiring in the event of a fire in the dwelling – as required by Building Regulations TGD Part B – Volume 2..

2.25 Water Installations

The Developer must ensure that Irish Water will supply water to each house within the development to facilitate all necessary testing, commissioning of the Water and heating systems within the dwelling well in advance of Substantial Completion of the development prior to handover of the Housing units to Dublin City Council.

All installations must be carried out in accordance with the requirements and recommendations of Irish Water, and in accordance with the Irish Water Code of Practice.

An in ground water meter & insulated meter matrix box to Irish Water standards and requirements must be located to the front of each house and located in a prominent location in the footpath outside each house in accordance with the Irish Water Code of Practice.

2.26 Waste Management

Individual refuse & recycling bin storage must be provided to each house as an integral element of the front garden & boundary design, and must be suitable to secure and accommodate three no. 600mm wide by 750mm deep by 1100mm high wheelie bins.

The bin store design must be incorporated into the house plot boundary design, and should allow adequate separation from the front wall of the dwelling to prevent ingress to the dwelling of fire or odours from the bins.

The bin storage area should be located on a concrete apron suitably sized, and to a suitable fall to allow for drainage and occasional cleaning down of the area.