

**17-20 Merchants Road Lower**

Design Statement

| <i>Rev</i>  | <i>Date</i>     | <i>Description</i>       |
|-------------|-----------------|--------------------------|
| <i>PL01</i> | <i>08.12.21</i> | <i>Part X Submission</i> |

HALL McKNIGHT



HALL McKNIGHT

MWP

 **TC ESTIMATING SERVICES**  
CHARTERED QUANTITY SURVEYORS

 **Comhairle Cathrach na Gaillimhe**  
Galway City Council

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U S E hotel

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# *1.0*

## *Executive Summary*

- 1.1 Overview*
- 1.2 Project Team*
- 1.3 Planning Context*

# 1.0 INTRODUCTION

## 1.1 OVERVIEW

### 1.1.1 INTRODUCTION

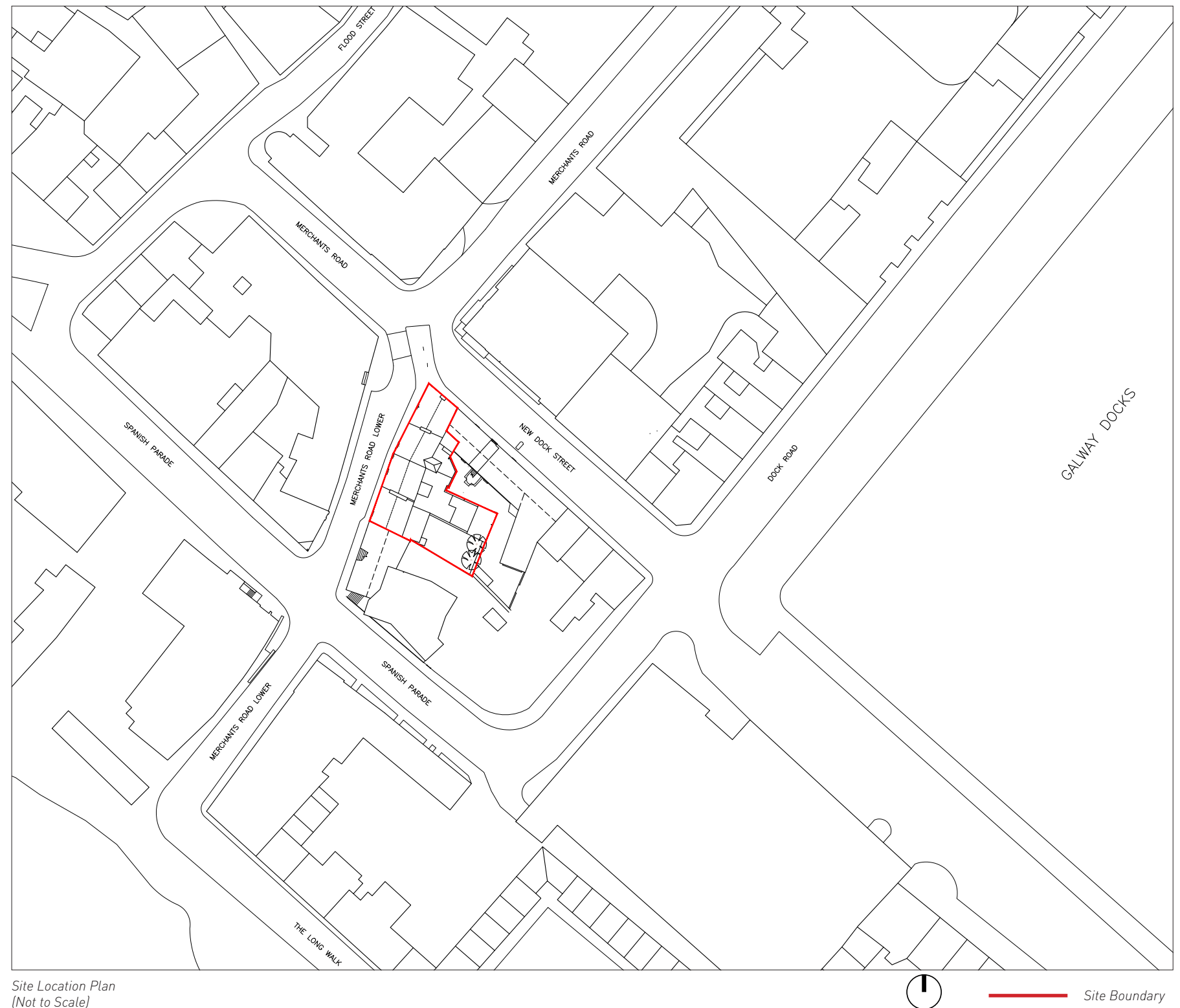
This Design Statement has been prepared by Hall McKnight on behalf of Galway City Council (GCC) for the redevelopment of 17-20 Merchants Road Lower in Galway City. The planning application is to be made to An Bord Pleanála under Section 177AE of the Planning and Development Act, 2000, as amended. This document is to be read in conjunction with the accompanying Part X Application drawings and documents submitted as part of this application.

The location of the site and extents of the site boundary are indicated on the adjacent location plan. The site area measures 0.048 ha.

### 1.1.2 PROJECT BACKGROUND

Hall McKnight and the integrated Design Team were awarded the tender for this development in Autumn of 2020. The project comprises an infill development within the tight urban quarter of Merchants Road Lower in Galway City on a brownfield site. A hybrid programme for a cultural venue and cafe on the ground floor and social housing apartments on the upper floor was brought forward by GCC in response to the cultural significance of this urban quarter and the social housing needs of Galway City.

The ground floor will consist of a café, cultural venue and a residential lobby area. The upper floors will contain social housing apartments with the roof top envisaged to serve as an amenity area for the apartment residents. The project will deliver 12no social housing units and a shell and core ground floor space for the cultural venue and cafe. The operator of the cultural venue and cafe will be tendered at a later date by Galway City Council and the design for this space is designed as a highly serviced, flexible space.



# 1.0 EXECUTIVE SUMMARY

## 1.2 PROJECT TEAM

In developing the proposals described in this document and other supporting information provided as part of the Part X Application, Hall McKnight have been working alongside:

- Architect/Team Lead: Hall McKnight
- Quantity Surveyor: TC Estimating
- Civil/Structural Engineer: Malachy Walsh and Partners
- Mechanical &Electrical Engineer: Malachy Walsh and Partners
- PSDP: Malachy Walsh and Partners
- Archaeology: Rubicon Heritage

## 1.3 PLANNING CONTEXT

Relevant Documents referred to throughout this document include;

- Galway City Development Plan (2017-2023)
- The Urban Development and Building Height Guidelines for Planning Authorities (2018)
- Sustainable Residential Development in Urban Areas (2009)
- Sustainable Urban Housing: Design Standards for New Apartments (2020)
- Best practice guidelines Quality Housing for Sustainable Communities (2007);
- Quality Apartments and Urban Housing; Housing Agency (2018)
- Design Manual for Urban Roads and Streets or 'DMURS' (2013); and
- Urban Design Manual (2009)
- Development Standards within Galway City Development Plan (2017-2023)
- Building Regulations and TGD



# 2.0

## *Project Context*

- 2.1 *Brief*
- 2.2 *Site Description*
- 2.3 *Planning Context*
- 2.4 *Heritage and Archaeology*
- 2.5 *Environmental Considerations*
- 2.6 *Flooding*
- 2.7 *Site Particulars*
- 2.8 *Ground Investigations*

## 2.0 PROJECT CONTEXT

### 2.1 BRIEF

The proposed development consists of a five-storey mixed use development at 17–20 Merchants Road Lower. The development will include social housing apartments on the upper levels with a cultural centre and café on the ground floor. On the roof level a communal roof terrace and play area also form part of the development.

The preliminary briefing requirements received from Galway City Council (GCC) for the new development at the DT tender stage were as follows;

- A cultural centre on the ground floor
- A cafe associated with the cultural centre on the ground floor
- Social apartment units on the first, second, third and fourth floors
- A shared roof top garden on the accessible roof

The project was taken through CWMF Stage 01 and 02 and the project now achieves the following accommodation;

- Cultural Centre Front of House (FOH) 172m<sup>2</sup>
- Cultural Centre Back of House (BOH) 47.7m<sup>2</sup>
- Ancillary Cafe facilities (incl WCHA WC) 20m<sup>2</sup>
- Cafe 64.8m<sup>2</sup>
- Covered Courtyard
- 5no 1B2P units
- 4no 2B3P units
- 3no 2B4P units
- Shared Rooftop Terrace 160.4m<sup>2</sup>

The 17-20 Merchants Road Lower site currently consists of four number two storey terraced dwelling houses which are in poor condition and vacant. The project brief required the demolition of these structures with provision for temporary structural shoring to adjoining residential properties.

The nature of regeneration with the city centre's medieval core and infill development on this constrained urban site requires a design led approach to massing and materiality that responds to and has regard for its surrounding context. This approach is in line with Project Ireland 2040's aim for compact growth and sustainable neighbourhoods that are attractive places to live and are within easy access to a range of local services, amenities, community facilities and public transport networks.



*Proposed View - Merchants Road Lower looking North*

## 2.0 PROJECT CONTEXT

### 2.2 SITE DESCRIPTION

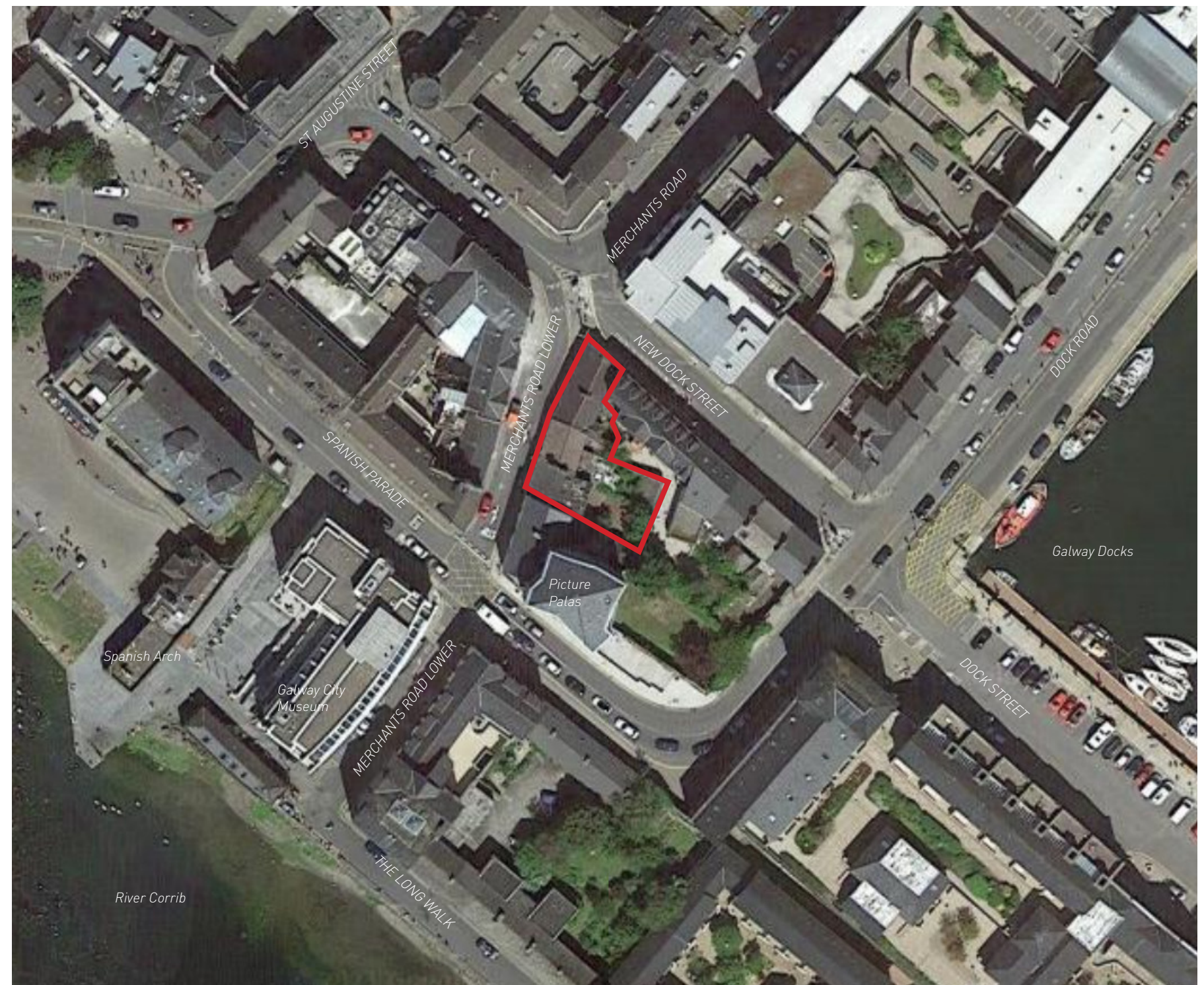
The site is currently occupied by No17-20 Merchants Road Lower, a terrace of 2 storey buildings bounded to the north by New Dock Street and to the west by Merchants Road Lower. The adjoining site to the west of No.17 Merchants Road Lower is an existing residential dwelling (No.16) and the property adjoining No. 20 Merchants Road Lower is a residential complex of apartments (Glor na Mara). There is a vacant site to the southeast.

#### Site Constraints

- Demolition of ACM containing structures required
- Provision for temporary structural shoring to adjoining properties
- The site cannot accommodate vehicular access points
- The site is susceptible to flooding. (Refer to FRA)
- Ground conditions consist of shallow limestone rock (extent and quantity to be determined by GI surveys)
- The site is located within a Zone of Archaeological Potential (ZAP)
- The close proximity of the Glor na Mara residential complex requires reduced massing to the rear of the site to limit overshadowing
- An existing window is located within the gable wall of No.16 requiring a set back to the massing of the proposals

#### Site Opportunities

- The local main drainage and service connections exist to facilitate the proposed development.
- The site location supports the Cultural Use proposed with the Picture Palas, Spanish Arch and Galway Museum in close proximity
- The site is located within the urban core of Galway City with excellent access to the Train Station, Bus Station and local amenities
- The primary axis of the site is East/West providing excellent aspect for the residential accommodation



Aerial View of Site

— Site Boundary

# 2.0 PROJECT CONTEXT

## 2.3 PLANNING CONTEXT

### 2.3.1 GALWAY CITY DEVELOPMENT PLAN (2017-2023)

#### POLICY 2.2 HOUSING STRATEGY

*Address the demand for additional social housing and social housing supports through a number of means including the construction of housing, direct acquisition of housing, delivery in conjunction with AHBs and the use of the RAS, HAPs, long term leasing and any other appropriate housing delivery initiative.*

#### POLICY 2.8 RESIDENTIAL USE WITH THE CITY CENTRE

The site is zone within the Galway City Development Plan for ‘City Centre’ use . The Development Plan Policy 2.8 City Centre Residential Areas notes that new residential development in particular has contributed to the vibrancy of the city centre. A minimum residential content is stipulated as below;

*“The Council will continue to encourage residential development by requiring a residential content of at least 20% of new development in the city centre.”* (p36)

The proposed development comprises 75% residential accommodation and 25% ground floor retail and cultural use.

#### POLICY 8.7 - URBAN DESIGN

Policy 8.7 Urban Design encourages encourage high quality urban design in all developments that contributes to successful urban regeneration in the city. The Galway City Development Plan defines principles of good urban design;

*“Good architecture is essential in creating a good image of the city with a strong identity. The detailed design of a building and use of materials are important considerations. High quality architectural design is also important in the context of urban design having regard to the layout and intensity of blocks, plots and buildings. The density of development and the mix, type and location of uses are also key considerations..”* (p123)

#### POLICY 7.2 - CULTURAL USE

Policy 7.2 Creative City encourages the provision of new and improved arts and culture facilities in the city and in district and neighbourhood centres where appropriate. There is a specific reference to the development of additional cultural facilities at Lower Merchants Road.

### 2.3.2 SOCIAL HOUSING STRATEGY

Social housing supply is being led by the national *Social Housing Strategy 2020*. The proposed social housing programme will be will be delivered in the city through central government commitments under the 3 year Housing Capital Programme.

### 2.3.3 PROJECT IRELAND 2040

The nature of the project as a brownfield city centre site reflects national housing policy and support for compact development within Ireland’s cities. *Project Ireland 2040* is the government’s long-term overarching strategy that combines The National Development Plan and the National Planning Framework. It is a national document that will guide at a high-level strategic planning and development for the country over the next 20+ years. This document also sets the context for each of Ireland’s three regional assemblies to develop their Regional Spatial and Economic Strategies taking account of and co-ordinating local authority County and City Development Plans in a manner that will ensure national, regional and local plans align.

The National Strategic Outcomes within Project Ireland 2040 include an objective for compact growth, in particular *“compact development that focuses on reusing previously developed, ‘brownfield’ land, building up infill sites”* (p28)

*“Carefully managing the sustainable growth of compact cities, towns and villages will add value and create more attractive places in which people can live and work. All our urban settlements contain many potential development areas, centrally located and frequently publicly owned, that are suitable and capable of re-use to provide housing, jobs, amenities and service..... Activating these strategic areas and achieving effective density and consolidation, rather than more sprawl of urban development, is a top priority.”* (p14)

A key future growth enabler for Galway within Project Ireland 2040 is *“Identifying infill and regeneration opportunities to intensify housing and employment development throughout inner suburban areas”* (p43)

The Regional Assembly also plays an active role in the development of the NPF. In it’s submission to the NPF, the Northern and Western Regional Assembly Regional Policy Objective 3.6.2 that *“The Assembly supports the proposition that 50% of new homes for the population targets will be constructed within the existing city development envelop, 40% of these shall be located on infill and/or brownfield sites.”*

### 2.3.4 BUILDING HEIGHT

*The Urban Development and Building Height Guidelines for Planning Authorities* (2018) issued by the Minister for Housing, Planning and Local Government sets out national planning policy that expand on the requirements of the National Planning Framework. These guidelines are set out for considering increased building height in various locations but principally (a) urban and city-centre locations which apply to the proposed site.

The proposed development is sited at a corner within the urban environment and a case is made in the below text for taller buildings to be located at important street junctions to assist in placemaking, and also the role they place in bringing forward additional housing.

*“Furthermore, while taller buildings will bring much needed additional housing and economic development to well-located urban areas, they can also assist in reinforcing and contributing to a sense of place within a city or town centre, such as indicating the main centres of activity, important street junctions, public spaces and transport interchanges. In this manner, increased building height is a key factor in assisting modern placemaking and improving the overall quality of our urban environments.”*(p8)

*“...for consolidation and densification in meeting our accommodation needs into the future must also be applied in relation to locations that development plans and local area plans would regard as city and town centre areas; for example, within the canal ring in Dublin and analogous areas in Cork, Limerick, Galway and Waterford ...in such areas, it would be appropriate to support the consideration of building heights of at least 6 storeys at street level as the default objective...where there are particular concentrations of enabling infrastructure to cater for such development, e.g. very significant public transport capacity and connectivity, and the architectural, urban design and public realm outcomes would be of very high quality.”* (p3)

Based on the above statements the proposed development of five storeys is in keeping with *The Urban Development and Building Height Guidelines 2018*.

## 2.0 PROJECT CONTEXT

### 2.4 HERITAGE AND ARCHAEOLOGY

#### 2.4.1 ARCHITECTURAL CONSERVATION AREAS (ACA)

The Galway City Council Development Plan 2017–2023 was consulted for records relating to Architectural Conservation Areas (ACAs). The stated objective of ACAs is to conserve and enhance the special character of the area, including traditional building stock and material finishes, spaces, streetscapes, landscape and setting. There are no ACAs within the proposed development site. The Design Team note that four ACAs are sited within in the surrounding city fabric - (The City Core, Dock Rd, St Nicholas St and The Long Walk). There are no anticipated effects of this development on the surrounding ACAs.

#### 2.4.2 ZONE OF ARCHAEOLOGICAL POTENTIAL (ZAP)

The site lies within the Zone of Archaeological Potential (ZAP) for the historic town of Galway (GA094-100) and to the southeast the medieval city walls (GA094-100001). An Archaeological, Architectural and Cultural Heritage Impact Assessment was commissioned for the proposed development and completed by Rubicon Heritage. The results of this assessment indicate that the development site as a whole is an area of archaeological potential and recommended a number of mitigation measures to be undertaken;

1. All ground reduction (including the removal of groundslabs as part of demolitions), should be subject to a programme of archaeological monitoring, under license, by a suitably qualified archaeologist.
2. If archaeological material is encountered, then it will be investigated and fully recorded. However, if significant archaeological material is encountered the National Monuments Service (DoHLGH) will be notified. Resolution of any such significant material will be determined in consultation with the NMS (DoHLGH).
3. A written report will be prepared detailing the results of all archaeological work undertaken.

The Design Team will incorporate these mitigation measures into the delivery strategy for the project. Copies of the Archaeological, Architectural and Cultural Heritage Impact Assessment will be submitted with the Part X Application to An Bord Pleanála.

#### Key

- Zone of Archaeological Potential (ZAP)
- Architectural Conservation Area (ACA)
- City Walls historical extents



Galway City Map - Heritage and Archaeological Implications

# 2.0 PROJECT CONTEXT

## 2.5 ENVIRONMENTAL CONSIDERATIONS

The EU Birds Directive in 1979 and the Habitats Directive in 1992 established the Natura 2000 network of sites of the highest biodiversity importance for rare and threatened habitats and species across the EU.

A radius of 10km is shown on the diagram adjacent to capture the Natura 2000 sites in proximity to the Merchants Road Project. As per the *Appropriate Assessment of Plans and Projects in Ireland* document published by the DEHLG, an AA Screening Assessment and an EIAR Screening Assessment has been undertaken by a suitably qualified member of the design team and copies will be submitted with the Part X Application to An Bord Pleanála. An NIS has also been prepared by Enviroguide and this will be submitted also.

The Natura 2000 sites situated within the 10km radius of the site are listed below;

*Habitats Directive Sites (SCI, SCI or SAC)*

- (A) Galway Bay Complex SAC
- (B) Lough Corrib SAC

*Birds Directive Sites (SPA)*

- (C) Inner Galway Bay SPA
- (D) Lough Corrib SPA
- (E) Cregganna Marsh SPA

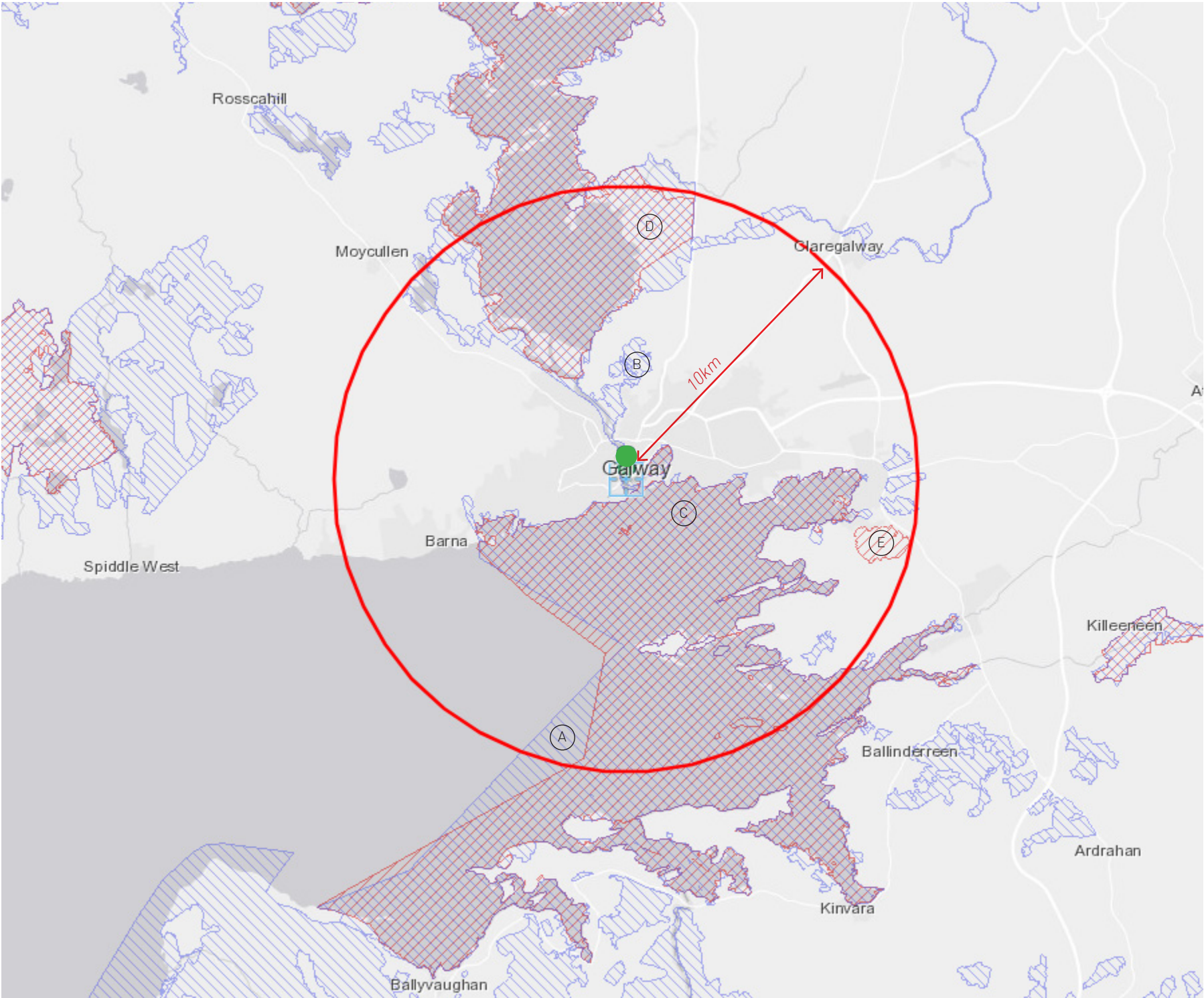
Key

Site Location

Habitats Directive Sites

Birds & Habitats Directive Sites

Birds Directive Sites



Extract from Natura 2000 Network Viewer showing Natura 2000 sites within 10km radius of the Merchants Rd site

# 2.0 PROJECT CONTEXT

## 2.6 FLOODING

Galway City is exposed to flooding from the River Corrib, high tides, storm surges, wave overtopping and stormwater drains. The OPW's Preliminary Flood Risk Assessment (PFRA) and the Western CFRAMs Programme, conducted under the EU Floods Directive, identified Galway City as an Area for Further Assessment (AFA) and significant work including coastal and fluvial modelling has been carried out. As a result, Galway City Council, and the OPW have now commissioned the Coirib go Cósta Galway City Flood Relief Scheme. The objective of Coirib go Cósta is to assess and develop a Flood Relief Scheme, that is technically, socially, environmentally, aesthetically and economically acceptable, to alleviate the risk of flooding in Galway City and is estimated to complete in 2029. The Merchants Road Site is located within the Coirib go Cósta Scheme Area within which physical works are proposed to be constructed, accessed and maintained as part of any feasible scheme.

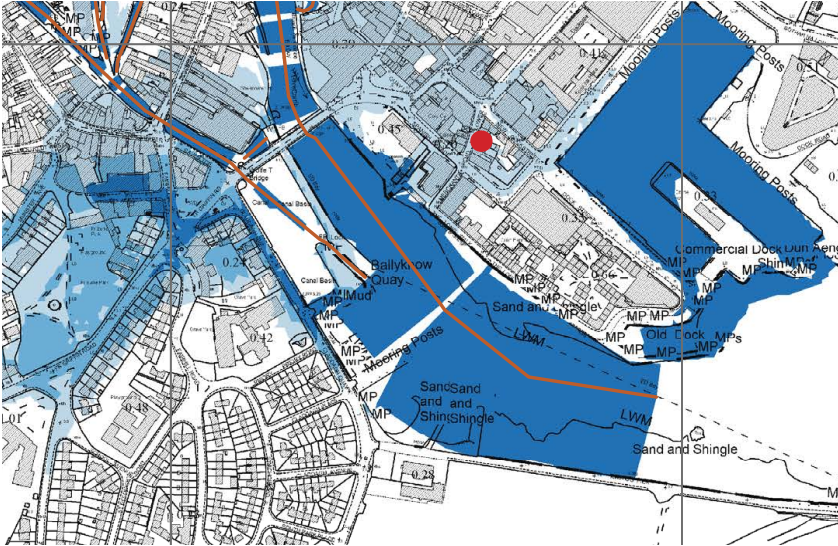
In the Planning System and Flood Risk Management, Flood Zones are used to indicate the likelihood of a flood occurring. These Zones (A,B or C) indicate a high, moderate or low risk of flooding from tidal or fluvial sources. The proposed development at 17-20 Merchants Road Lower is identified as a Zone A with a high risk of tidal flooding. Under Planning Circular PL15/02, the Justification Test is required for highly vulnerable developments in Zone A areas. Residential development is considered 'highly vulnerable development'. Within Flood Zone A areas, less vulnerable uses are encouraged at ground floor levels which is the case in the 17-20 Merchant Rd Lower development. Within the SFRA, small scale infill housing have been considered and subject to site specific flood risk assessment, can generally be considered appropriate.

As per the Strategic Flood Risk Assessment (SFRA) for the Galway City DP 2017-2023, the proposed development will require a site-specific Flood Risk Assessment (FRA) for the Planning Application. This has been undertaken by MWP who advised a flood line of 4.76mOD for the development along with some additional mitigation measures which have been designed into the scheme.

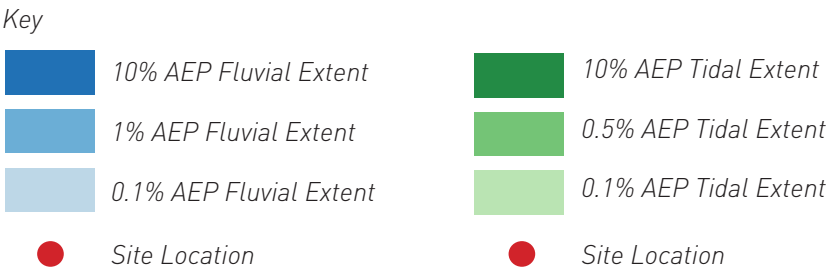
Copies of the Project Specific Flood Risk Assessment (FRA) will be submitted with the Part X Application to An Bord Pleanála.



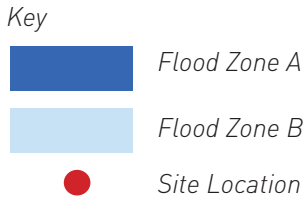
Coastal Flood Extents (Western CFRAM Extract)



Fluvial Flood Extents (Western CFRAM Extract)



Extract from Strategic Flood Risk Assessment (SFRA) GCDP 2017-2023



# 2.0 PROJECT CONTEXT

## 2.7 SITE PARTICULARS

### 2.7.1 SITE SERVICES

#### ESB Networks

Early engagement between MWP and ESB Networks indicates that a substation will not be required for the building. Undergrounding of existing overhead cables at Merchants Road Lower were highlighted as an enabling works item and an invoice from ESB Networks for the undergrounding of the overhead cables was sought. This came back at €26k invoice for the undergrounding and diverting of all overhead ESB lines outside Merchants Road Lower and includes for the ESB's own civil crew to supply and install all the ducting given the close proximity to live cables. This figure has been incorporated into the enabling works costing.

#### Irish Water

A Pre-Connection Enquiry Form was submitted to Irish Water to confirm the connection and that the existing wastewater drainage infrastructure has sufficient capacity to serve the proposed development. The proposed development will discharge into a combine sewer however the constrained nature of the site means that on site attenuation is not proposed within the current design. The constrained nature of the site was noted within the Enquiry Form. The Confirmation of Feasibility has been received from Irish Water - the Preconnection Enquiry reference number is CDS21004542.

#### Eir Ireland

The site is located in close proximity to Eir Ireland network and internet connection for the new development is anticipated.

### 2.7.2 SITE SURVEYS

The Design Team procured numerous surveys and specialist consultant input at Stage (i) outlined below;

#### 01. Topographical Survey

The topographical survey of the site was tendered to three surveyors, two of whom submitted prices. The contract was awarded to the most competitive tenderer, Murphys.

#### 02. Utilities Information

Information of underground services was acquired from Irish Water, ESB Network, Gas Networks Ireland and Eir Ireland.

#### 03. Asbestos Survey

The asbestos survey works RFT was issued to three companies and no tenders were received. The Quantity Surveyor recommended a local contractor, Higgins Demolitions and Asbestos Removal, who could undertake the works. The refurbishment/demolition asbestos survey (RDAS) including surveying, sampling, and lab testing was subsequently undertaken. ACM was detected in the roof slates of No. 19 and No. 20 and also in the stippled plaster ceiling of No. 18. Photographs of the rear gardens were reviewed and there was no evidence of asbestos. However, a caveat has been including the report that access to the rear gardens will be arranged at the beginning of on-site works to confirm this finding.

#### 04. Archaeological Consultant

Three quotes for an Archaeological, Architectural and Cultural Heritage Impact Assessment were returned with Rubicon Heritage providing the most economically advantageous tender. The archaeologist was briefed and undertook a site visit on 12/04/21. Information was provided to the archaeologist on the proposed development including the foundation strategy. The Archaeological, Architectural and Cultural Heritage Impact Assessment proposed a series of mitigation measures to be undertaken.

Please see overleaf for commentary on Ground Investigations and GPR survey.

### 2.7.3 SITE OWNERSHIP AND ACCESS

The entire site is in the possession of Galway City Council and there are no easements, rights of way or other restrictions to be taken account of in the design development. The extent of the site boundary is shown in the Diagram below. The site area is calculated at 481.90 m<sup>2</sup>. The site shares a boundary with an existing residential dwelling (No.16) and the property adjoining No. 20 Merchants Road Lower is a residential complex of apartments (Glor na Mara). There is a vacant site to the southeast.

The site is proposed to be accessed primarily by Merchants Road Lower. This road may have to be maintained as active for the duration of the works. The Preliminary Health and Safety Plan prepared by MWP identifies the physical constraints and the confined extent of site in relation to the volume of activities proposed therein, especially considering the inner-city location. Constraints identified include;

- Limited and restricted areas and access for site personnel parking and site deliveries and the
- Requirement for deep excavations immediately adjacent to boundaries
- Construction works within close proximity to routes for the general public poses substantial risks which must be addressed.
- deliveries to be coordinated with traffic management
- Limitations on craneage methodologies to be employed on the site.
- Adjacent public access roadways and paths
- Immediately adjacent structures including boundaries



GCC Site Ownership Boundary

## 2.0 PROJECT CONTEXT

### 2.8 GROUND INVESTIGATIONS

During Stage (i) MWP Structural Engineers conducted an extensive desk top review of the information supplied and available in the proximity of the site which confirmed that the proposed building will be piled. This included reviewing geological maps for the area and site investigation reports for other developments in the vicinity of the site at the Atlantic Museum, and the Spanish Arch. The interpretation of this information suggested that the soil overlying the Metagabbro and Orthogneiss bedrock is a very loose to loose sands and gravels. MWP concluded that it would not be feasible to use raft or pad foundations on this soil due to their low strengths along with the envisaged high-water table and the high loads to be supported by the proposed development. Therefore, MWP's current proposal of piling through these sands/gravels to the bedrock appears to be the most appropriate option for the proposed development. Further site investigation is required however to further de-risk the project from unforeseen ground conditions as geology is inherent by its very nature. This would confirm with greater certainty the pile lengths required, bedrock quality and the geo-hydraulic regime within the site. The site currently contains existing terraced housing which were judged to inhibit the Ground Investigations outcomes at Stage (i) due to limited access and a constrained site. If the site investigation is to be conducted prior to the demolition works, MWP noted that the following options were available:

- Completing it within the footprint of the building would mean only lightweight dynamic probes would be used which would not provide certainty on the bedrock level or require extensive temporary works so to accommodate a rig thus increased cost. This may not be preferable to the council given the security concerns for this site. Any monitoring points installed could be disturbed by the demolition works.
- Completing the rotary cores on the street around the site would entail increased risk due to the traffic management required and the interaction with the public. Traffic management works element involved would also lead to an increased cost. While these boreholes would give an indication of rock levels beside the site there is potential the main contractor for the proposed works could claim unforeseen ground conditions as they would not be within the footprint of the site especially if hazardous material is uncovered. There is also a risk that there may not be a viable position on the street to conduct them as the streets are congested with utilities at present with the risk of unmapped utilities being present in the areas where mapped services are absent. It may not be feasible to conduct groundwater monitoring at these locations due to the public interaction/traffic management.

MWP's recommendation therefore was to conduct the Site Investigations when the demolition works have been completed and prior to issuing of tender documents for the main works.

The main agreement to move the project forward without the site investigations was due to delays caused by the Covid-19 pandemic and programme implications as well as Ground Investigation information being available for the neighbouring Palas site. MWP advised that the information on the street/footpath would be no more accurate than that of the Palas therefore agreement was sought from GCC Housing Department to progress without the site investigations being undertaken at Stage 01. The following advantages to the strategy of conducting the site investigation after demolition were also observed in a memo issued by MWP on 29/04/21;

- Mobilising after demolition works would give the site investigation contractor a clear area to set up their equipment within the site with minimal height constraints thus minimising any temporary works to be conducted by them.
- It would simplify the traffic management down to how to safely access and egress the site.
- It would allow for recovery of soil and rock samples from within the site footprint. These would be sent for lab testing including WAC analysis and rock core testing. This would assist in minimising the risk of unforeseen ground conditions for the project.
- Conducting the site investigation with boreholes within the site also allows for groundwater monitoring to be conducted on the site to determine if there is a tidal influence on the geo-hydraulic regime within the site due to its proximity to the harbour and to confirm the approximate depth to groundwater on the site footprint.
- A contractor would require this information to inform their Temporary Works design for the site and they could put in a claim if there is no information available. Having these monitoring points in place would also allow a contractor the opportunity to visit the site to take their own measurements to further de-risk the project from claims.

Leaving the site investigation until the demolition works are complete was therefore judged by MWP and agreed by GCC to be the most appropriate option for this site. It was also judged to be the safest option from a PSDP due to the reduced traffic management requirements, less Temporary Works and reduced interaction with the public. The current site investigation information available for adjacent sites has provided a level of information that would be similar to what the site investigation would obtain if it was competed now. Conducting the site investigation on the cleared site after demolition with minimal height constraints is envisaged to be a more fruitful exercise providing a greater level of detail on the onsite conditions and geo-hydraulic regime than provide a revealed a greater level of information than what could be obtained now on the site. This would assist in de-risking the project from claims by a Contractor on unforeseen ground conditions and allow for more optimised design of the pile foundations.



*Aerial View of the site from the West*



*Aerial View of the site from the East*



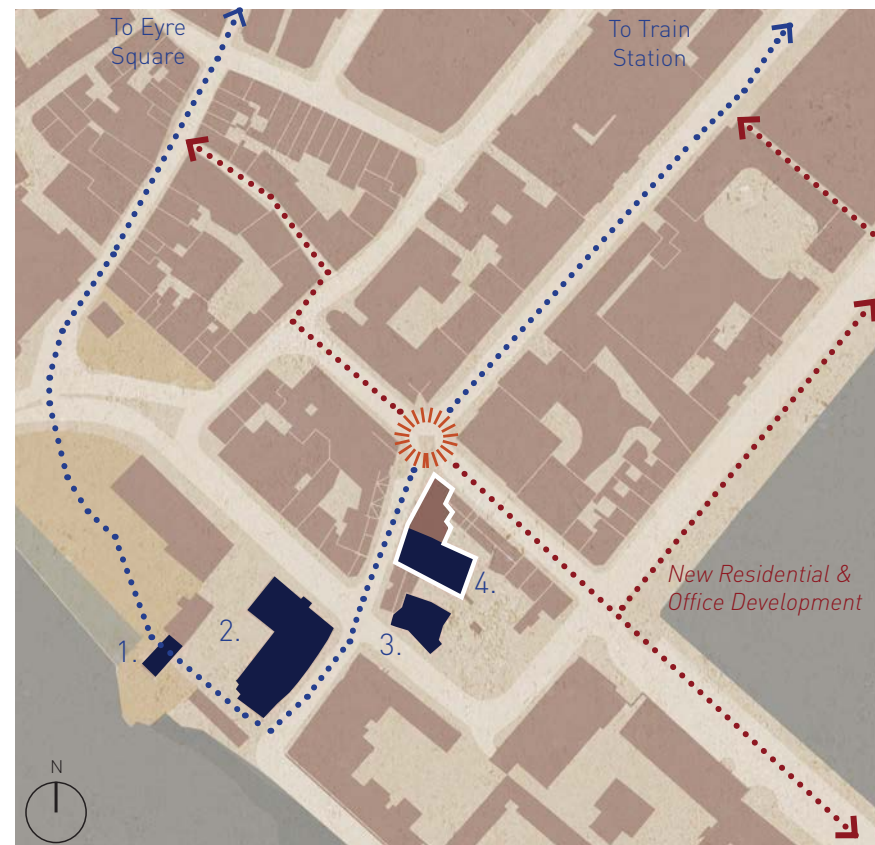
# 3.0

## *Project Proposal*

- 3.1 *Design Strategies*
- 3.2 *Cultural Venue and Cafe*
- 3.3 *Residential Apartment Design*
- 3.4 *Materials and Finishes*
- 3.5 *Development Standards*
- 3.6 *Building Services*
- 3.7 *Civil and Structural*

### 3.0 PROJECT PROPOSAL

### 3.1 DESIGN STRATEGIES



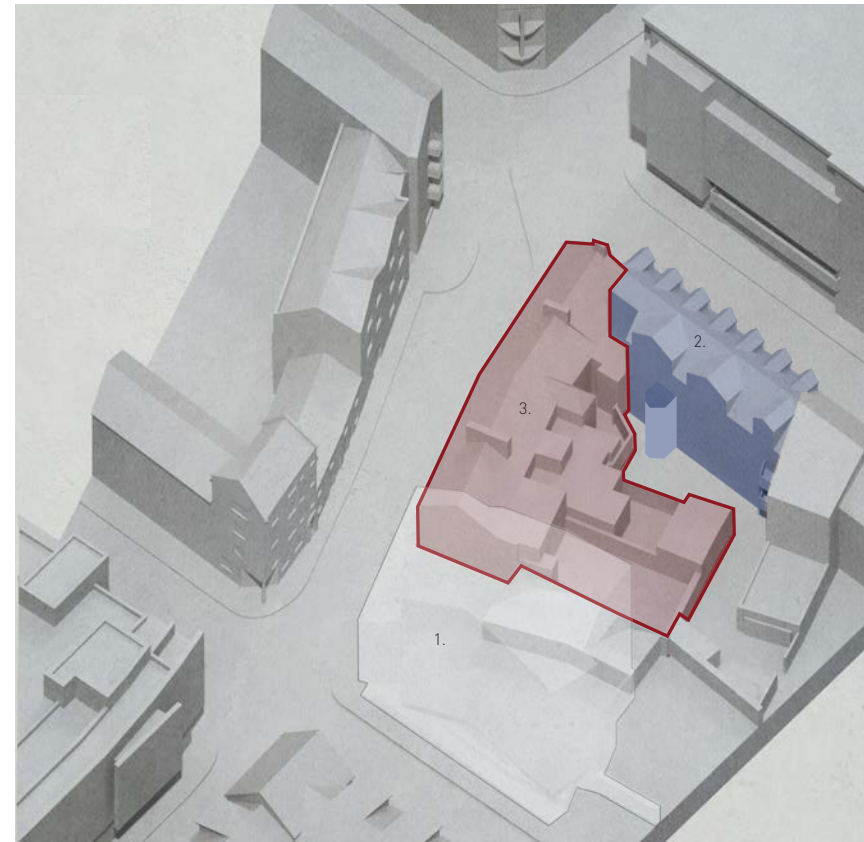
## Cultural Cluster Strategy

### A. CULTURAL CLUSTER

The wider project aims sees the Ground Floor Cultural Venue contribute to a 'Cultural Cluster' envisioned by GCC for this area of Galway City. Within the tight medieval street pattern, the corner of the site frames an urban node within the pedestrian's experience of the city. A cafe associated with the Cultural Venue is proposed at this prominent corner on ground floor. The cultural attractions in the area are highlighted on the map and numbered below;

Key

- |    |                                |                                                                                     |  |                         |
|----|--------------------------------|-------------------------------------------------------------------------------------|--|-------------------------|
| 1. | Spanish Arch                   |                                                                                     |  |                         |
| 2. | Galway Museum                  |  |  | Key Cultural Routes     |
| 3. | Pálás Cinema                   |  |  | Urban Node              |
| 4. | Proposed Cultural Venue & Cafe |  |  | Pedestrian Desire Lines |



### Site Context and Neighbouring Buildings

### B. RESPOND TO URBAN BLOCK CONSTRAINTS

The massing and design of the scheme is predicated on an informed response to the site and the neighbouring buildings. Hall McKnight have undertaken detailed shadow studies to assess the impact on the Glór Na Mara Apartment Building and the immediately adjacent No.16 Merchants Road Lower as well as wider impacts on the surrounding buildings. The massing of the building was developed in response to these studies.

Key

1. *Pálás Cinema & Reconstructed No.16 Property*
2. *Glór Na Mara Apartment Building*
3. *Site Extends with Existing Buildings*



Merchants Road Lower Elevation

### C. PIECE OF TOWNSCAPE WITHIN URBAN QUARTER

The site presents a long frontage to Merchants Road Lower which disrupts the historical narrow plot frontage defined by the existing terraced housing. The Design Strategy utilises the active frontage of the cafe and cultural venue to animate the street. By defining the project as two urban 'blocks' the project contributes to the rhythm of the street. A large opening defines the meeting point of these two 'blocks' which references medieval laneways and the open air arched entrances to Palas Cinema further down the street. The building is conceived as a solid entity with punched hole openings (as opposed to framed) referencing the solid/mass ratio and traditional construction of the existing terraced housing. Through high quality design and careful attention to the context, the project is stitched into the existing townscape.

## 3.0 PROJECT PROPOSAL

### 3.2 CULTURAL VENUE AND CAFE

As part of the project brief, a cultural venue and cafe are included at Ground Floor with an enhanced ceiling height of approximately 3.3m. The cafe and cultural venue be designed and built as shell and core including basic servicing as part of the overall construction project. GCC have confirmed that the cafe does not require a kitchen and/or extract and this is reflected in the design.

The Design Team have followed best practice in terms of servicing and flexibility of use in order to ensure that the spaces are an attractive offer to prospective tenants of the space. These include;

- A covered courtyard provided as a break out space between the cafe and cultural venue
- Preserving a visual connection to the street through active frontage
- High quality materials on external envelope
- Wall space has been maximised within the cultural venue to allow for flexible gallery use
- An indicative counter space with access to a ticketing desk has been incorporated to allow minimal staffing levels for the operation of both the cultural venue and the cafe
- A comms room, switch room, plant room are included in a Back of House (BOH) area.
- 1no Universal WCHA toilet has been included for joint use by the cafe and cultural venue.
- Small admin area with overhead rooflight included for use by the cultural venue tenant
- The design team have limited freestanding columns within the cultural venue space to allow for a flexible space with range of possible uses
- A saw-tooth roof profile brings light into the deep cultural venue plan. The light from these windows can be regulated subject to the use of the space.

#### Key

|                                                                                                                                 |                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
|  Cafe GIA = 64.8m <sup>2</sup>               |  Residential GIA = 21.2m <sup>2</sup>           |
|  Cultural Venue FOH GIA = 172m <sup>2</sup>  |  Residential Bin Store GIA = 20.8m <sup>2</sup> |
|  Cultural Venue BOH GIA = 47.7m <sup>2</sup> |                                                                                                                                    |
|  Ancillary GIA = 14.9m <sup>2</sup>          |                                                                                                                                    |
|  External/Unheated GIA = 56.29m <sup>2</sup> |                                                                                                                                    |



Ground Floor and Mezzanine Plan

## 3.0 PROJECT PROPOSAL

### 3.3 RESIDENTIAL APARTMENT DESIGN

In total, 12no social housing apartments for GCC will be delivered in this development on Levels 01-L04. The apartment layouts have been designed in line with the various DoHPLG guidelines. Central to the design approach was the addition of a void located above the ground floor courtyard. This inflection in the plan allows good access to daylight for the dwellings and limits the depth of the plan on this constrained infill site.

Repetition of unit types and stacking services had been optimised in the building design to ensure efficiency of design and construction and to limit service or drainage offsets between levels.

The Fire Strategy for the scheme includes the provision of sprinklers to facilitate open plan layouts in line with TGD Part B requirements. Open plan layouts have been incorporated as the spatial and daylight quality of the apartments were judged to be significantly improved in comparison to a protected corridor design option.



Concept Diagram illustrating courtyard in yellow



Level 01 - Typical Upper Floor Plan

## 3.0 PROJECT PROPOSAL

### 3.4 MATERIALS AND FINISHES

A Pre-Application meeting was held with Galway City Planning Department on 22nd January 2021. The below observations were made on the standard of finish expected within the project, especially in relation to the Ground Floor cafe, entrance and cultural venue.

*"Materials and quality are critical and must not be compromised."*

Liam Blake, GCC Senior Planner

*"A huge amount of positives in the presentation including the consideration of materiality."*

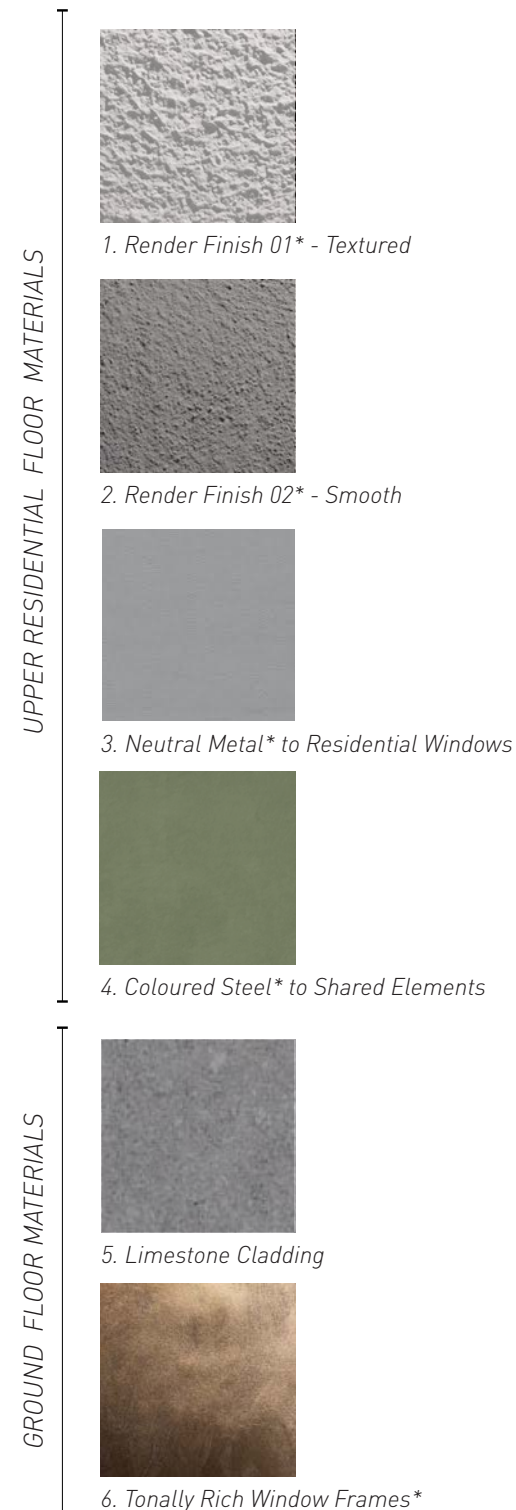
Peter Staunton, GCC City Area Planner

*"The hidden detail of the scheme is paramount and careful and fine detailing will be very important to ensure the building ambitions remain (post Planning Consent)"*

Caroline Phelan, GCC Senior Planner

The Design Team responded to the comments on the detail and quality requirements for the Ground Floor element of the project. It is noted that these Ground Floor finishes will be balanced with a more economic approach to the upper levels of social housing which will be subject to Unit Ceiling Costs defined by Government Funding. Due to the ground floor having a separate funding stream, there is more scope for finer finishes and detail and the design response will consider the implications of this holistically.

A palette of materials was developed with these considerations, while also taking into account the prevailing material characteristics of the city and this particular urban quarter. The texture and specification of the stone base and the rendered finishes will be finalised using samples during design development.



\*Note : RAL and Finish to be confirmed during developed design



View from North down Merchants Road Lower

# 3.0 PROJECT PROPOSAL

## 3.5 DEVELOPMENT STANDARDS

### 3.5.1 DENSITY

The site area measures 0.048 ha. The density calculation of 12 social housing units / 0.048 ha comes to 250 units per hectare. Within *Sustainable Residential Development in Urban Areas (2009)*, inner city infill residential sites are identified as appropriate locations for increased densities. The document notes that in order to maximise inner city and town centre population growth, there should, in principle, be no upper limit on the number of dwellings that may be provided within any town or city centre site, subject to the following safeguards:

- compliance with the standards of public and private open space adopted by development plans (DPs);
- avoidance of undue adverse impact on the amenities of existing or future adjoining neighbours;
- good internal space standards of development;
- conformity with any vision of the urban form of the city as expressed in development plans, particularly in relation to height or massing;



Site Area Calculation

### 3.5.2 SCHEDULE OF ACCOMMODATION

The proposed housing mix has been developed in dialogue with GCC with a mix of 1B2P, 2B3P and 2B4P apartments to meeting specific housing need. The *Sustainable Urban Housing: Design Standards for New Apartments (2020)* notes that no more than 10% of the total number of units in any private residential development may comprise of 2B3P person apartments, however the tenure of this development is social housing therefore it is assumed that this restriction does not apply. The constrained nature of the site means that it is not possible to accommodate additional 2B4P units within the housing mix.

The design strategy for this constrained urban infill site sought to maximise the number of residential apartments on the site while responding to the challenges of overshadowing and overlooking neighbouring buildings. The 'folded' nature of the residential plans allow optimum light and access to facade ventilation for all units while insuring that an optimum mix and number of units is provided to ensure the viability of the residential scheme for GCC.

Proposed Schedule of Accommodation

| Level | Unit Type | Area Minimum (m2) | Area Proposed (m2) | % Increase Minimum Area | Private Amenity Minimum (m2) | Private Amenity Proposed (m2) |
|-------|-----------|-------------------|--------------------|-------------------------|------------------------------|-------------------------------|
| L01   | 1B2P      | 45                | 47.45              | 5.4%                    | 5                            | 5                             |
| L01   | 2B3P      | 63                | 64.8               | 2.8%                    | 6                            | 6                             |
| L01   | 2B4P      | 73                | 73.6               | 0.8%                    | 7                            | 7                             |
| L02   | 1B2P      | 45                | 48.1               | 5.4%                    | 5                            | 5.1                           |
| L02   | 2B3P      | 63                | 64.8               | 2.8%                    | 6                            | 6                             |
| L02   | 2B4P      | 73                | 73.6               | 0.8%                    | 7                            | 7                             |
| L03   | 1B2P      | 45                | 48.1               | 5.4%                    | 5                            | 5.1                           |
| L03   | 2B3P      | 63                | 64.8               | 2.8%                    | 6                            | 6                             |
| L03   | 2B4P      | 73                | 73.6               | 0.8%                    | 7                            | 8.3                           |
| L04   | 2B3P      | 63                | 66.4               | 5.3%                    | 6                            | 6.2                           |
| L04   | 1B2P      | 45                | 51.2               | 13.7%                   | 5                            | 6.7                           |
| L04   | 1B2P      | 45                | 53.2               | 18.2%                   | 5                            | 7.4                           |

### 3.5.3 SAFEGUARDING HIGHER STANDARDS

*Sustainable Urban Housing: Design Standards for New Apartments (2020)* notes that for schemes of 10-99 apartments, a schedule of apartment accommodation should be submitted for planning that identifies all those apartments that exceed the minimum floor area standard. Within this development, every apartment exceeds the standard with the exception of 1no. 2B4P unit on Level 03 which meets the minimum.[See Schedule of Accommodation adjacent].

It is noted that the percentages overruns on floor space are lower on this proposed residential scheme than a typical greenfield housing scheme due to the constrained nature of the infill site. Every effort has been made by the design team to maximise the quality of the residential apartments in recognition of this. Open plan layouts and sprinklers have been incorporated to maximise the spatial quality of the residential units.

Summary of Proposed Unit Types

| Unit Type    | No.       |
|--------------|-----------|
| 1B2P         | 5         |
| 2B3P         | 4         |
| 2B4P         | 3         |
| <b>TOTAL</b> | <b>12</b> |

# 3.0 PROJECT PROPOSAL

## 3.5 DEVELOPMENT STANDARDS

### 3.5.4 PLOT RATIO

The 17-20 Merchants Road site is zoned as a City Centre use within the Galway City Council Development Plan (GCCDP) 2017-2023. In relation to development permitted in the City Centre Zone, the GCCDP states that a plot ratio of 2.0 : 1 should not normally be exceeded.

The plot ratio for the proposed development is 2.66 : 1. This exceeds the plot ratio within the GCCDP for the City Centre Zone as noted above. The proposed development occupies a corner site within the urban fabric across from a substantial hotel development of four storeys, an arthouse cinema Picture Palas and the Merchants Square development. Picture Palas has a plot ratio of 2.9 : 1 and the Merchant's Square development as built is 2.7 : 1 (a rooftop extension scheme with a plot ratio of 3.3 : 1 has received planning permission). Therefore, there is a precedent on Merchants Road Lower and mitigating factors for a plot ratio higher than 2.0 : 1. The viability of the development is dependent on the provision of 12no social housing units and as such there is no scope for reduction. The massing of the scheme to the rear has been carefully tuned to reduce overshadowing impacts using a pitched roof element on L04.

Furthermore, a higher plot ratio within the city centre region of Galway is supported in principle within the GCCDP 2017-2023 with reference to the below extracts;

*"In the CC zone increased plot ratio will only be acceptable where it can be demonstrated that the proposed development would make a significant architectural contribution to the character of the city."* p148

*"In the case of infill development in an existing terrace or street, it may be necessary to have a higher plot ratio in order to maintain a uniform fenestration and parapet alignment or to obtain greater height for important urban design reasons. In such circumstances, an increased plot ratio may be permitted."* p190

Schedule of Gross Floor Area

| Level                 | Gross Floor Area* (m2)                    |
|-----------------------|-------------------------------------------|
| Ground Floor          | 45.90 (Resi) + 312.60 [Cultural] = 358.50 |
| Level 01              | 233.00                                    |
| Level 02              | 229.10                                    |
| Level 03              | 229.10                                    |
| Level 04              | 209.50                                    |
| Level 05 Roof Terrace | 24.00                                     |
|                       | TOTAL = 1283.20m2                         |



Key

- Cultural/Cafe GFA
- Residential GFA

\* Gross Floor Area = as per definition in the GCCDP Risers and voids not counted. Lift shaft and plant included as per RCIS Code of Measuring practice for GIA.

# 3.0 PROJECT PROPOSAL

## 3.5 DEVELOPMENT STANDARDS

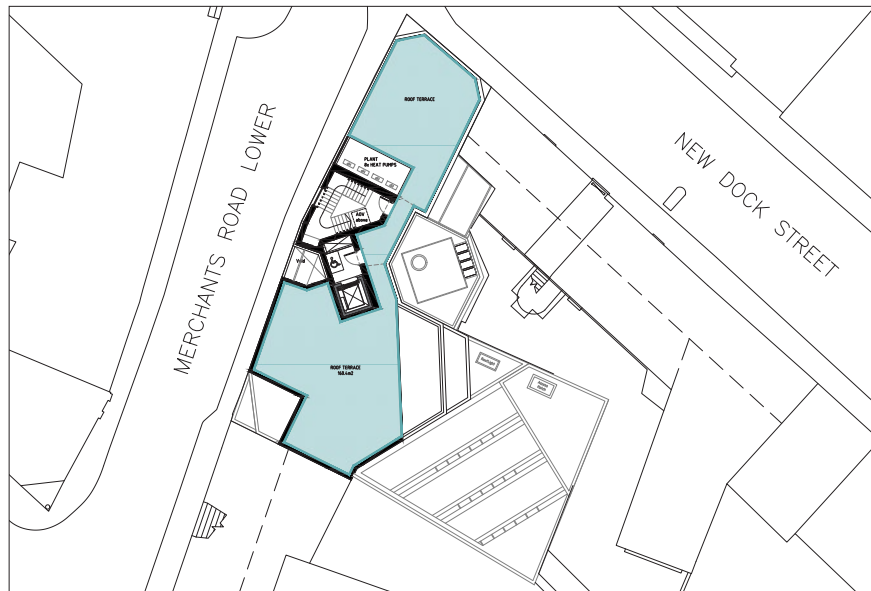
### 3.5.5 COMMUNAL AMENITY SPACE

*Sustainable Urban Housing: Design Standards for New Apartments (2020)* Appendix 01 requires a total of 70sqm communal amenity space. The fully accessible roof terrace of 160.4m<sup>2</sup> within the development meets this requirement. Solid balustrading is provided to a 1.6m, an increase to Building Regulations in order to promote use of this space as a supervised play area.

### 3.5.6 OPEN SPACE REQUIREMENT

The GCCDP 2017-2023 states that the open space provided within City Centre Residential Development shall be equivalent to 30% of gross floor area of residential use within the development. The gross floor area of residential use within the proposed scheme is calculated at 900.7m<sup>2</sup>. Applying 30% to this figure generates a total of 270.21m<sup>2</sup>. An accessible roof terrace is proposed to satisfy the open space requirement due to the constrained nature of the site. Once plant area has been excluded from the area calculations, the roof terrace provides 160.4m<sup>2</sup> of open shared space for the development which is below the 30% requirement.

The GCCDP 2017-2023 notes that “in situations where effective open space cannot be provided on site due to the location of existing buildings, inappropriate aspect, small scale or for other reasons, a relaxation in this standard may be considered. Innovative ways of providing open space will be open for consideration including roof gardens, winter gardens and balconies having considered the characteristics of the site and the capacity for the delivery of sustainable open space.”



Roof Terrace Level - Open Space Calculation

Key

■ GFA Open Space

### 3.5.7 PRIVATE OPEN SPACE

The proposed apartments shall be provided with private balconies, in line with the minimum guidelines stated in the *Sustainable Urban Housing: Design Standards for New Apartments (2020)*. Please refer to 3.5.2 Schedule of Accommodation for a unit by unit breakdown.

### 3.5.8 CAR PARKING PROVISION

The GCCDP 2017-2023 notes a maximum 1 car parking space per dwelling for developments within the City Centre Residential Areas. For new developments in the city centre residential areas where a reduction in car parking standards is considered acceptable by the Council on grounds of urban design or sustainability, a transport contribution will be levied in lieu of on-site parking spaces.

For the proposed development, GCC has instructed that no car parking is to be included in the development due to the constrained nature of the site.

### 3.5.9 ACCESSIBILITY

The development has been designed with due regard to the Building Regulations Part M and Technical Guidance Document M - Access and Use.

### 3.5.10 CYCLE PARKING PROVISION

There is no dedicated cycle parking provision proposed within the development due to the constraints on this infill site. The GCCDP 2017-2023 states that where compliance with this standard is not deemed appropriate a transportation contribution may be levied accordingly.

### 3.5.11 WASTE MANAGEMENT

The GCCDP 2017-2023 notes some general requirements for bin storage within new residential developments;

- Bin storage shall generally be on the ground floor of developments and be screened from public view and adjacent to the block it serves
- Adequate storage for waste disposal shall be provided on site
- Residential units with no rear access shall provide adequate storage for the bins to the front of the development, in contained units

A bin store has been provided on the Ground Floor for residential use with street access for collection. Early engagement was undertaken with GCC and local waste collection companies in order to size the bin store in relation to the collection schedule.

## 3.0 PROJECT PROPOSAL

### 3.6 BUILDING SERVICES

The water supply for the development will be obtained via new connections from the existing 150mm Ductile Iron water supply present in Merchant's Road Lower. The foul and storm water will discharge by new connections into the 225mm combined sewer present in Merchant's Road Lower. The storm water discharge will be consistent with the current runoff regime for the site. The foul and storm water will be kept separate for as far as practicable so that their discharges could be separated in the future if a separated sewer system is installed in Merchant's Road Lower. A Confirmation of Feasibility has been received from Irish Water in advance of planning to confirm that they have capacity for the proposed works in their infrastructure. Early engagement was undertaken with ESB in relation to the proposed electrical load of the building with confirmation received that a substation will not be required for the development. Undergrounding of existing overhead cables at Merchants Road Lower were highlighted as an enabling works item and an invoice from ESB Networks for the undergrounding of the overhead cables was sought. Please refer to Site Services in Section 2.2.6 for further information.

There will be 15 no. ESB meters for the development - 12no for the apartments ,1 no. landlord meter, 1no for the cafe and 1no for the cultural centre to allow separate metering and billing. Due to the flooding risk identified by MWP, the meters are proposed to be located within a dedicated meter enclosure within in the development. A switch room located on GF within the cultural venue BOH area will house a Main Distribution Board for the café, music centre and landlord areas. A mechanical plant room is provided for the café and cultural venues part of the shell and core delivery. A comms room which can house a 42U cabinet will be provided to allow maximum flexibility for comms and AV equipment that may be associated with the music centre. The heating and cooling strategy for the cafe and cultural centre will be confirmed at the next design stage.

The heating strategy for the residential apartments proposes air to water heat pumps. The 12no. external heat pump units for the apartments will be located on the roof. The indicative ventilation strategy for the residential units is for Demand Control Ventilation in each of the apartments. This strategy will be confirmed at the next design stage. Electrical Consumer Units will be provided within each apartment. A DEAP analysis for the apartments and a NEAP analysis for the cultural venue & café will be undertaken in line with NZEB requirements. Following the development of open plan layouts in response to site constraints, a sprinkler system conforming to BS 9251 will be provided for the development. Further design development is required at the next stage.

### 3.7 CIVIL AND STRUCTURAL

The proposed development entails the demolition of the existing terraced structures on the site to accommodate a new five storey structure. The proposed structure will be formed with an in-situ reinforced concrete frame consisting of down stand beams and flat slabs. Lateral stability will be provided by shear walls and the lift core. Infill will be achieved with masonry and glazing as detailed in the Architectural drawings. The foundation solution will be in-situ reinforced concrete slab supported by ground beams supported on CFA piles. The piles are envisaged to be socketed 2m into competent rock which is assumed to be at 7m below existing ground level based on site investigations carried out in the area by separate parties. Detailed site investigation will be conducted prior to the construction of this structure to verify the assumed geological conditions which underlay the site. The piles will be offset from the interface with the neighbouring structures to ensure their constructability.

The risk of flooding will be mitigated by the use of an in-situ reinforced concrete upstand around the perimeter of the structure with temporary demountable defences to be installed at the doorways. These will be installed to a minimum elevation of 4.76mOD Malin (0.5% AEP Event in MRFS +250mm freeboard).

Several framing schemes were evaluated to determine the solution most appropriate to the proposed development. Access constraints including narrow road geometry, restricted site area and its inner-city location played a dominant role in the selection of the framing scheme employed. The use of precast concrete and steel solutions were discounted due to economics and the access constraints as outlined previously. In-situ reinforced concrete appears to be more appropriate due to its economics and that shorter length of vehicles required for deliveries to the site. It is best suited to attain the form for the structure desired by the Architect.

The existing structures on the site are proposed to be demolished under an Enabling Works Contract. Shoring of the existing structures along with underpinning including boundary structures are envisaged to be employed to ensure their temporary stability in the intervening period between demolition of the existing structures and the construction of the proposed development.



# 4.0

## *Proposed Visualisations*

- 4.1 View 1: View looking South down Merchants Road Lwr
- 4.2 View 2: From Spanish Parade looking North
- 4.3 View 3: Through entrance gateway to covered courtyard
- 4.4 View 4: Through entrance gateway with gate closed
- 4.5 View 5: View of covered courtyard space
- 4.6 View 6: New Dock Street Elevation (NTS)
- 4.7 View 7: Merchants Road Lower Elevation (NTS)
- 4.8 View 8: Aerial View of Project

4.1 VIEW 01: VIEW LOOKING SOUTH DOWN MERCHANTS ROAD LOWER



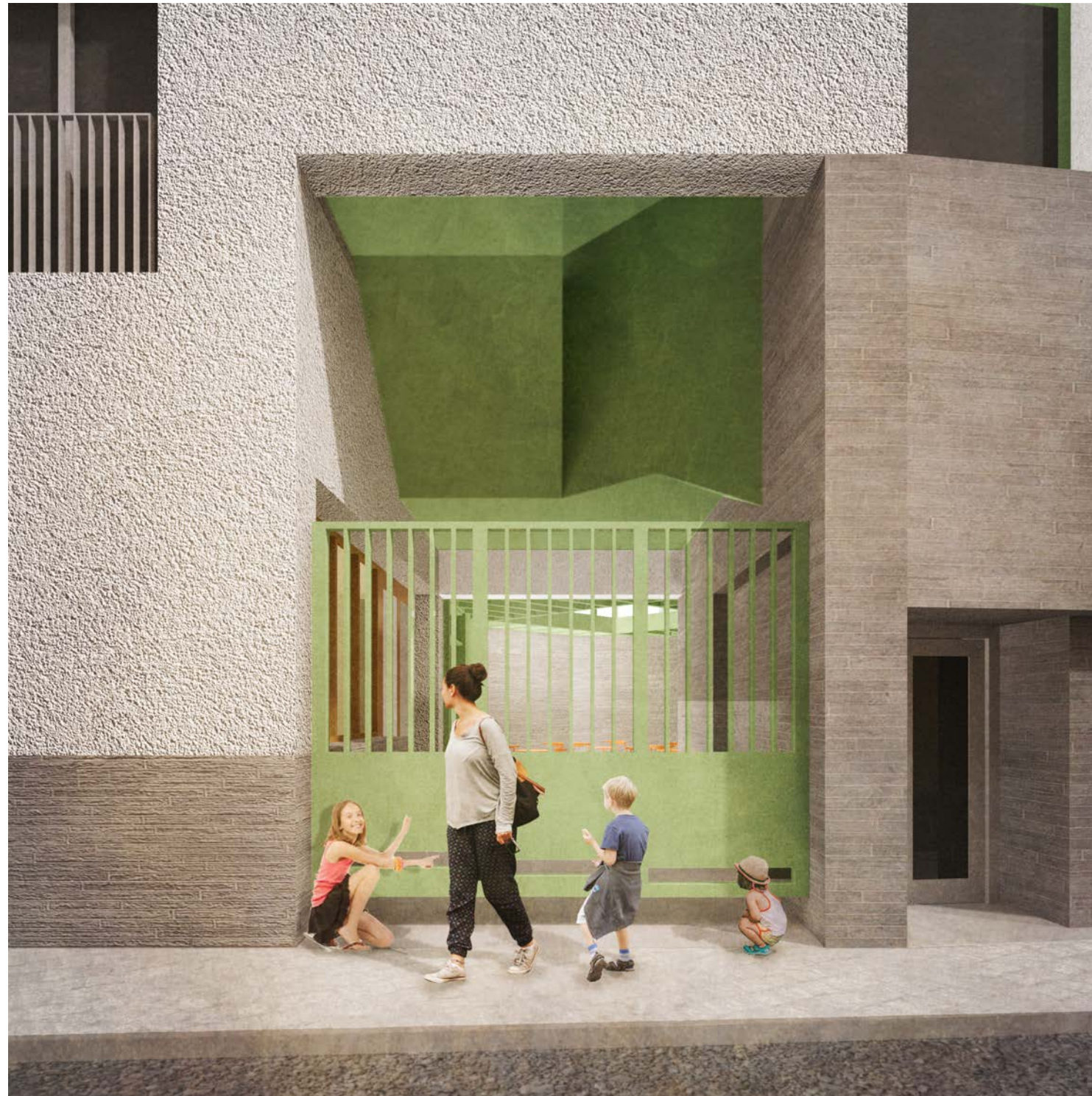
4.2 VIEW 02: FROM SPANISH PARADE LOOKING NORTH UP MERCHANTS ROAD LOWER



4.3 VIEW 03: LOOKING THROUGH ENTRANCE GATEWAY INTO COVERED COURTYARD



#### 4.4 VIEW 04: LOOKING THROUGH ENTRANCE GATEWAY WITH GATE CLOSED



*View looking through entrance gateway with gate closed*



4.5 VIEW 05: VIEW OF COVERED COURTYARD SPACE



4.6 VIEW 06: NEW DOCK STREET ELEVATION (NTS)



4.7 VIEW 07: MERCHANTS ROAD LOWER ELEVATION (NTS)



4.8 VIEW 08: AERIAL VIEW OF SCHEME



