



Knocknacarra District Centre, Rahoon, Galway

Materials and Finishes Report

Issued for SHD Planning Application To An Bord Pleanala - Stage 3

October 2019



Introduction

This document sets out the proposed material expression and the detailing of Knocknacarra District Centre. It includes appropriate precedent, details the different facades showing materials choices.

This document is supplemented by the Building Lifecycle Report appended to the application.

This development proposes a best in class residential scheme designed to the new Planning Guidelines - 'Sustainable Urban Housing: Design Standards for New Apartments' Guidelines for Planning Authorities for a development of

- 332 apartments (93 one beds, 219 two beds & 20 three beds) including and ancillary support accommodation such as plant rooms, refuse stores and secure bicycle stores.
- Dedicated tenant amenity accommodation for shared workspaces, shared dining and lounge facilities and residential amenity space for tenants.
- Over 2840sqm of commercial / retail accommodation including 16 no. retail units for small scale shopping and food and beverage.
- Creche of 174sqm including an external secure play area
- A community use facility
- A new District Centre Public Square (30mx67m) and other residential dedicated open space in the form of courtyards and podium terraces for the use of the residents.

Particular attention has been paid to the materials used in those parts of the public realm that will be well used such as central public space and streets that connect the District Centre with the rest of the surrounding area and the retail park and streets beyond.

This report proposes to demonstrate the proposed materials and finishes to the scheme including specific detailing of finishes, the treatment of balconies in the apartment buildings, landscaped areas, pathways, entrances and boundary treatments. The proposed development shall provide high quality and sustainable finishes and details to create a distinctive character for Ragoon in Galway.



PROPOSED VISUALISATION OF NEW ENTRANCE ROAD

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02 Proposed Materials

2.1 Building Design

The facade concept is to provide a modern interpretation of the Irish vernacular townscape by providing varied elevations breaking down the larger blocks into smaller more familiar house frontages.

The blocks are broken down to form more vertical elements with varied facade treatments such as coloured render, brick and panelised facades. This will create interest and visual variety for this development and form a more meaningful architectural language appropriate for Galway City.



Facade Concept



02 Proposed Materials

2.2 Facade Material Proposals

The materials proposed for the external façades shall be easy to maintain and have excellent life-cycle qualities. The choice of external materials has been driven by our Client's requirement for a fully sustainable, green and robust design solution. The high-quality façade materials are designed to look as good over their design life with brick, high quality render finishes and high quality glazing all designed to ensure minimal staining. The choice of materials also will be harmonious with the surrounding buildings in Knocknacarra.

The elevations are broken down to look like individual buildings with the corner building taller and fully brick to give prominence to the entrance to the Retail Park. A choice of contextual materials such as natural stone cladding at ground floor, brick of various colours and textures to identify different blocks / neighbourhoods, glazed screens and self coloured render will provide a modern interpretation with traditional materials.

By having contrasting materials, the form of the building is broken down into separate elements. Balconies are simply detailed with glazed and metal balustrades. Windows are high quality aluminium faced timber.

The buildings are modulated to respect the differing environmental conditions and to respect the context. Thus street elevations have more formal brick treatments while sheltered rear courtyards have more render finishes.

High quality design and a clear green infrastructure will be applied to all perimeters of the proposed building. Connections with existing hard landscaping of the site are carefully considered. Green buffer zones incorporating soft landscape screening will be used to create a visual and acoustic buffer to the new road way and associated traffic. High quality glazing systems shall ensure noise abatement.

Please refer to detailed elevations / sections submitted with the application which describe the materiality of each block. Refer to Elevations included in Appendix A



ELEVATION ON TO NEW CIVIC SQUARE (BLOCK D)



02 Proposed Materials

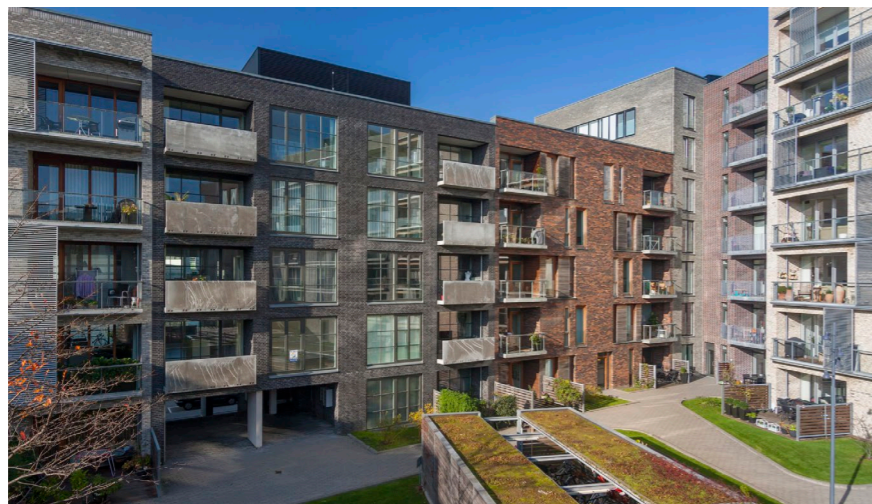
2.3 Materiality

The architecture and landscape design of the scheme will work together to make a high quality coherent scheme. Particular attention has been paid to the materials and facade design used in all parts which overlook the civic open spaces and the semi-private courtyards. The residential development and landscape areas will be adapted for all ages with a range of robust landscaped features.

Durability often goes hand-in-hand with low maintenance. The demands for innovative building techniques and the inclusion of materials and components with lower life-cycle costs, test the knowledge and skills of building designers. Robustness of the design and construction is paramount in ensuring the materials selected will be lasting and look attractive throughout their life. The chosen materials will be robust and good detailing shall ensure minimal staining on façades.

The glazing will be high quality with a of 70% Light transmittance and 37% 'G' value with a 'u' value of 1.4wm2k for the ensemble. The windows will achieve the best 'U' value while ensuring good transparency. The target BER of the building is to be A rated.

The materials selected for use in the building envelope will be robust and require low maintenance. Refer to the accompanying Building Life Cycle report for further detail on the building life cycle strategy.



BALCONY TREATMENTS



ELEVATION ON TO NEW ROAD (BLOCK A IN FOREGROUND)

Buff coloured brick to Block A at either end of block as bookends

Painted steel ballustrades with concrete / steel balcony

Selected painted render finish with precast copings

Timber / Aluminium privacy louvres at ground floor level

planting privacy screens at ground floor level



02 Proposed Materials

2.4 Facade Material Proposals



Elevation to new District Square showing brick / metal railings and local stone cladding to ground floor retail units



Pigmented rough textured render to courtyard elevations



Grey brick to Block B on street elevations



Heritage buff brick to elevations to street



Reconstituted stone cladding to lower levels



Elevation to courtyard between Blocks A and D



02 Proposed Materials

2.4 Facade Material Proposals

The façades of the new development shall be articulated to create a lively/moving façade. The existing surrounding facades have no real urban context with regard to materials. A new urban context has to be created through the placement of the new streets and facades.

A choice of contextual materials such as natural stone cladding at ground, glazed screens and self coloured render will provide a modern interpretation with traditional materials.

The proposed buildings will use a mix of buff / grey brick and coloured render facades. Different bricks and different facade colours are used to create diversity on the different blocks which will lead to a more varied and interesting facade typology.

At the lower levels robust cladding shall be used in difference to the street realm to ensure a quality treatment to the visited areas. This will ensure the buildings shall not deteriorate over their life times. The architectural language will be contemporary throughout but picks up on the language of Galway and the Irish streetscape.

Windows shall be a high quality, thermally broken, ppc aluminium product (Velfac or similar). The balcony structures will be factory painted mild steel, as will the infill panels. A portion of the roofs to all blocks will have p.v. panels which will be concealed behind the parapets.





02 Proposed Materials

Facade Material Proposals



Elevation to new District Square showing brick / metal railings and local stone cladding to ground floor retail units

02 Proposed Materials

Facade Material Proposals



Elevation of Block D to new District Square showing coloured render finish, metal railings and local stone cladding to ground floor retail units



02 Proposed Materials

2.5 Treatment of balconies

The proposed scheme provides private amenity space through the use of private balconies and terraces which achieve and/or exceed the prescribed minimum areas and adjoin the main living spaces/ bedspaces of the apartments. Balconies (or roof terraces) are provided to all apartment units as shown on the floor plans where they will benefit from natural sun light for at least part of the day.

Balcony Typology - Balconies are simply detailed with glazed and light weight powder coated metal balustrades. Balconies all have a functional relationship with the main living areas of the apartment. Vertical PPC Metal louvered screens are provided for privacy and shading.

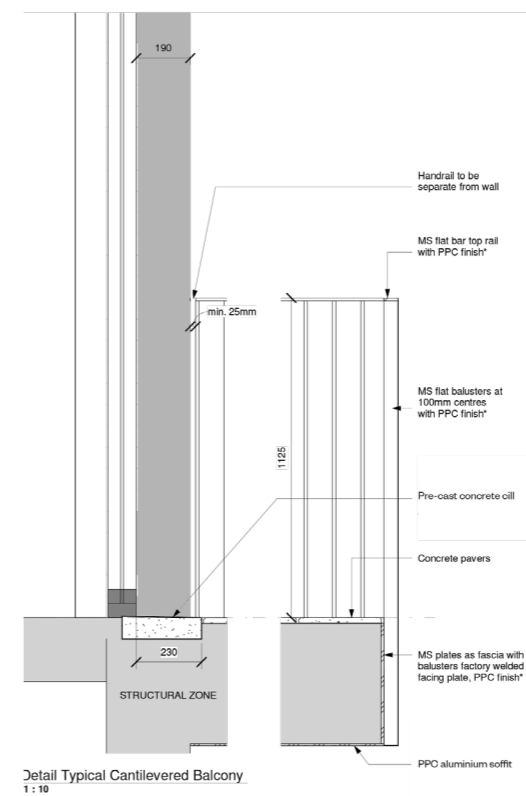
Balconies will have a minimum depth of 1.5 metres and meet the minimum floor area requirement under the guidelines. A combination of bolt-on balconies and inset balconies are provided to give visual interest. Glazed balustrades to the top floor shall be high enough to provide with protection yet retain views to the surrounding area and to the sea as the site enjoys good orientation. The use of differing balcony typologies shall ensure the treatments provide privacy and provide visual interest to the facades.



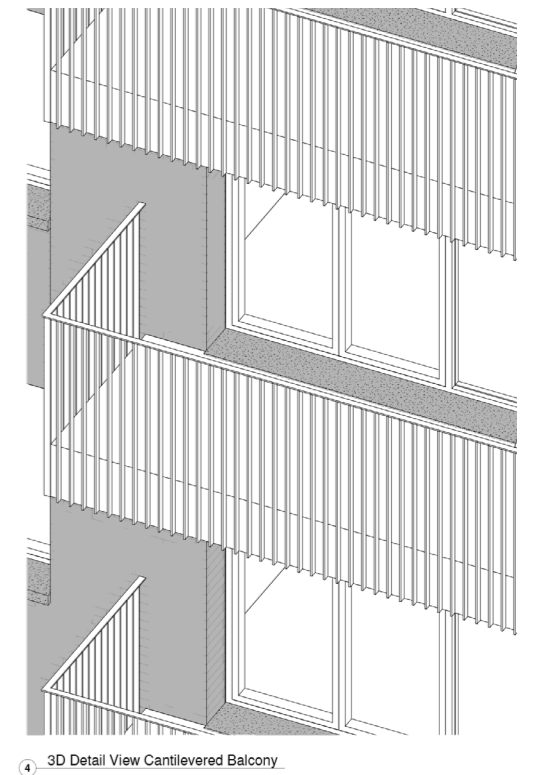
BALCONY TYPOLOGIES



EXAMPLE OF BALUSTARDE TO UPPER FLOORS



EXAMPLE OF BALUSTARDE DETAILS



3D Detail View Cantilevered Balcony

03 Landscape Design

3.1 - Landscape Design

A comprehensive landscape plan has been designed for the courtyard at podium level, roof gardens and the public realm from Landscape Consultants Ait. The landscaped courtyards and terraces will incorporate a combination of quality hard landscaping, dense planting, seating, lighting and play areas.

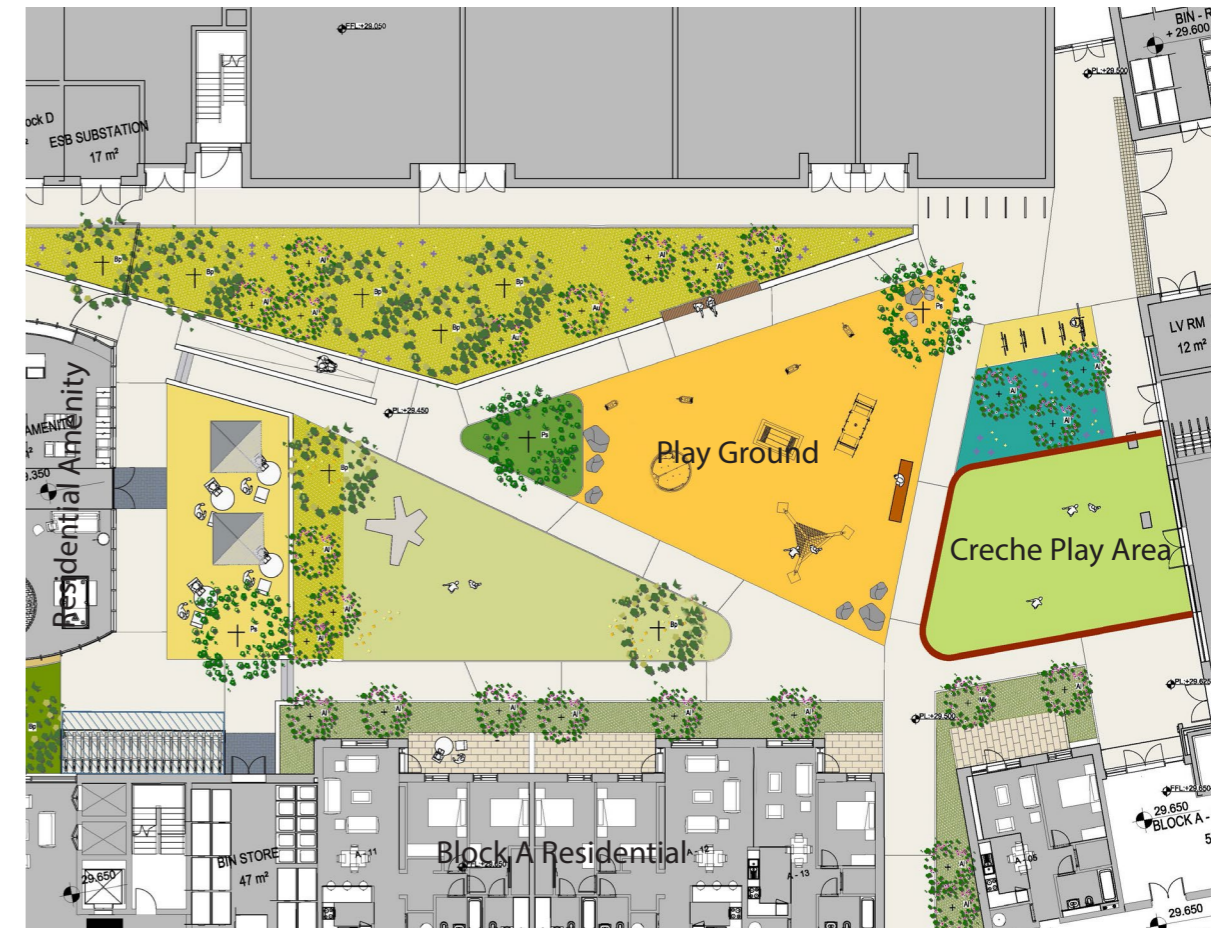
The landscape concept for the District Centre will be a coherent, robust, long lasting and inspiring design solution. Taking a 'site specific' approach the intention is to create an innovative and creative solution that is appropriate for the environment and caters for the needs of all the end users equally.



New Square Design visualisations



District Centre Public Plaza Design



Internal courtyard

3.2 - Boundary treatments and public realm

The concept for the scheme is based on delivering a high quality residential development that responds to the existing context and which seeks to create an integrated, permeable and sustainable residential development.

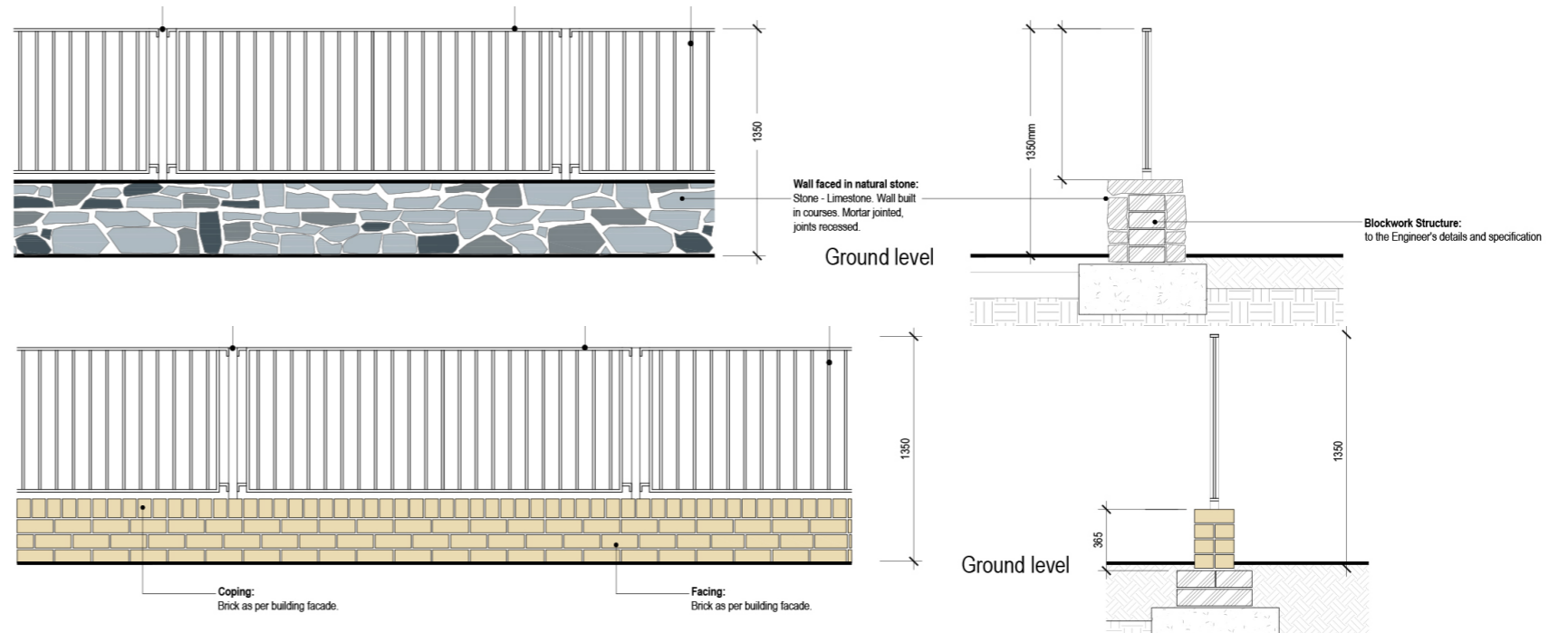
A series of external spaces have been created within the development ranging in hierarchy from the civic amenity of the public plaza, which will be designed to provide a vibrant and robust heart to the quarter, through to communal residential courtyards envisioned as comfortable and attractive spaces for residents and down to the small, private garden spaces of individual apartment units. The various spaces will be clearly defined and identifiable as public, semi private and private space.

The landscape design will deliver robust and durable spaces, ensuring longevity and minimising the requirement for extensive on going maintenance. Soft landscaping has been selected to promote invertebrates and pollinators and reduce the use of chemical herbicides.

Secure and comfortable communal amenity spaces will be provided for residents of the development across three primary open spaces at Block B, the courtyard between Blocks A & D and the over podium garden at Block E & F

The residential development and landscape areas are designed for all ages. Accessibility in the apartments has been modified to better cater for all users and be easily adapted to ensure good quality design. The development will provide a balance of apartment typologies that cater for the proposed demographic and enhanced amenity spaces are provided for all occupants such as shared sitting / dining areas, storage for bulky items, co-working spaces, café, shared dining area and the new community facility to be delivered.

A stone faced plinth wall with railing top is proposed as formal boundary along the Western Distributor Road and Gort Ná Bro respectively. Full Boundary details for the proposed wall and railing are further detailed in the Landscaping Report.



Boundary treatments



proposed courtyard treatment



03 landscape Design

3.3 - Streetscapes and Pathways

The overall design concept for the scheme is based on delivering a high quality residential development that responds to the existing context and which seeks to create an integrated, permeable and sustainable community adjoining the Gateway Retail Park and in the heart of Knocknacarra District Centre. The blocks are designed to ensure adequate separation distances are maintained to ensure sufficient daylight / sunlight and to ensure privacy for the adjoining residential development at Gort Na Bro and the surrounding streets. The internal courtyards have been designed to benefit from good orientation and be sufficiently wide to enjoy good privacy.

The proposed buildings facing onto the public streets will create a definitive urban edge to the the WDR and Gort Na Bro. The more formalised streetscapes will be complemented by a soft landscaped green buffer zone and pedestrian footpath. There are a number of activity areas provided in the public realm such as play spaces, seating areas and areas where the cafe / restaurants can spill out on to the public realm. The use of hard and soft landscaping to make the realm more comfortable and permeable will greatly enhance the public realm.

Footpaths and streets facilitate convenient access throughout the site. Footpaths and road comply with DMURS requirements. All areas will be designed to facilitate universal access to all users. Permeable pedestrian and cycle routes will be enhanced and have priority over car routes.

All materials will be designed to a high standard, will be robust and with stand a long-life, as well as meet the BCARCE standard, where required. The new street realm will be landscaped with high quality materials such as High quartz concrete pavers, ground mounted LED strip lighting, polished flags, bound gravel surrounding mature tree specimens in planters and seating located in sunny areas. Furniture proposed have a multifunctional use and create an attractive urban landscape to provide amenity area for the residents.

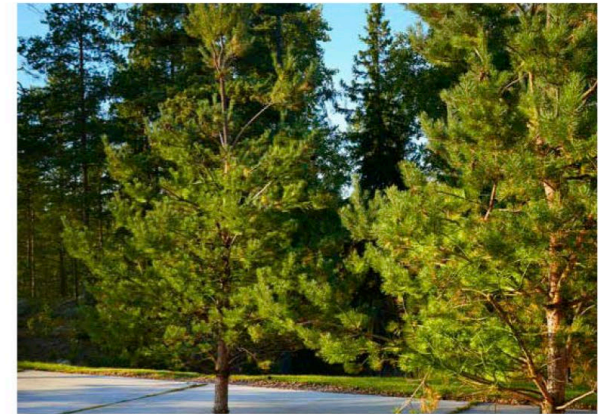
The landscaping proposals throughout will provide for high quality urban outdoor spaces.



Large civic space utilising asphalt surface.



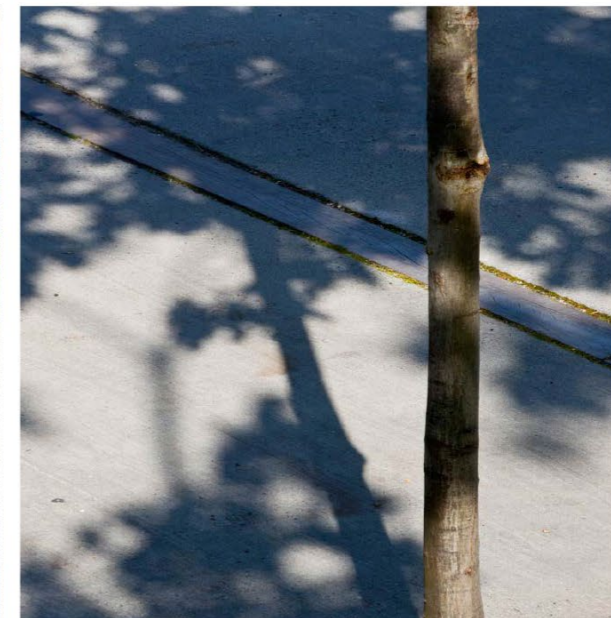
Attractive, sculptural lighting columns are proposed to create strong vertical elements within the square while providing adequate light levels through high quality LED fittings.



A stand of feature pines tree is proposed to bring year round visual interest and a structural form to the proposed planting on the plaza.



Residential courtyard - in situ concrete paved circulation with firm gravel to bicycle stands



Brushed concrete with flush banding through expansion joints



Natural stone sets to public realm/ private thresholds



Artificial Turf grass to over podium garden



Pre-cast Concrete block paving to cafe/ restaurant outdoor seating area



Softfall Safety Surface to play areas



Pre-cast concrete pavers to residential terraces and podium garden

Proposed landscpae treatments

Conclusion

The proposed material and finishes to the scheme will be of the highest quality. Particular care has been taken for the design of the private and public realm to ensure high quality and sustainable finishes and details which will create a distinctive character for the development. The proposed development will form a sustainable design solution for this site.

Achieving design quality is key to ensuring this civic, retail and residential development provides both durability and performance throughout the duration of its life. The quality of the private and public realm of this development is key to having a successful neighbourhood. High quality design and a clear green infrastructure will be applied to all perimeters of the proposed building, with particular attention to the materials and facade design used in all parts which overlook the District Square and along the street frontages.

The detailing and specification for materials and finishes has taken into account the Micro-climate of sunlight, daylight, wind to ensure a design solution that is robust, fit-for-purpose and will be of the highest quality over its design life.

The Knocknacarra District Centre has been designed in order to ensure that robust and long life materials and products with low maintenance are selected as much as possible. Material selection has gone through a rigorous selection process to ensure the proposed materials will meet the highest lifecycle value. Equally the sustainability credentials of the selected materials has been reviewed thoroughly to ensure optimum design solutions.

The use of robust high quality landscaping materials for this site is intended to provide materials that reduce the need for ongoing maintenance costs. Materials have been selected based on the value they bring in terms of low maintenance and easy cleaning and their aesthetic value.

The chosen cladding materials will be robust and good detailing shall ensure minimal staining on facades. Hard-wearing internal finishes are selected to ensure the building remains robust. Resilient materials have been selected for balconies, paving areas and for all external accessible areas. The selection of external materials will minimise maintenance as all materials are self-finished, robust and will not require painting over their life span.



Appendix A - Elevations

Materials for Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 3 Selected Metal Roof Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 12 Selected Steel Railings To Balconies.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 17 Wall & Railings. Refer to Landscape Architects Drawings.
- 35 Selected Metal Louvered Screen.
- 36 Selected Metal Fins/Brise-Soleil.



1 BLOCK - A - EAST FACADE ALONG WESTERN DISTRIBUTOR ROAD
1 : 200



2 BLOCK A - WEST FACADE ALONG LANDSCAPED COURTYARD
1 : 200

Appendix A - Elevations

Materials for Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 3 Selected Metal Roof Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 10 Selected Entrance Canopy.
- 12 Selected Steel Railings To Balconies.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 17 Wall & Railings. Refer to Landscape Architects Drawings.
- 23 Own-Door Access Units.
- 32 Residential Block Entrance.
- 35 Selected Metal Louvered Screen.
- 36 Selected Metal Fins/Brise-Soleil.



Appendix A - Elevations

Materials for Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 3 Selected Metal Roof Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 10 Selected Entrance Canopy.
- 12 Selected Steel Railings To Balconies.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 17 Wall & Railings. Refer to Landscape Architects Drawings.
- 23 Own-Door Access Units.
- 32 Residential Block Entrance.
- 35 Selected Metal Louvered Screen.
- 36 Selected Metal Fins/Brise-Soleil.



1 BLOCK B - SOUTH FACADE ALONG WESTERN DIST RD
1 : 200

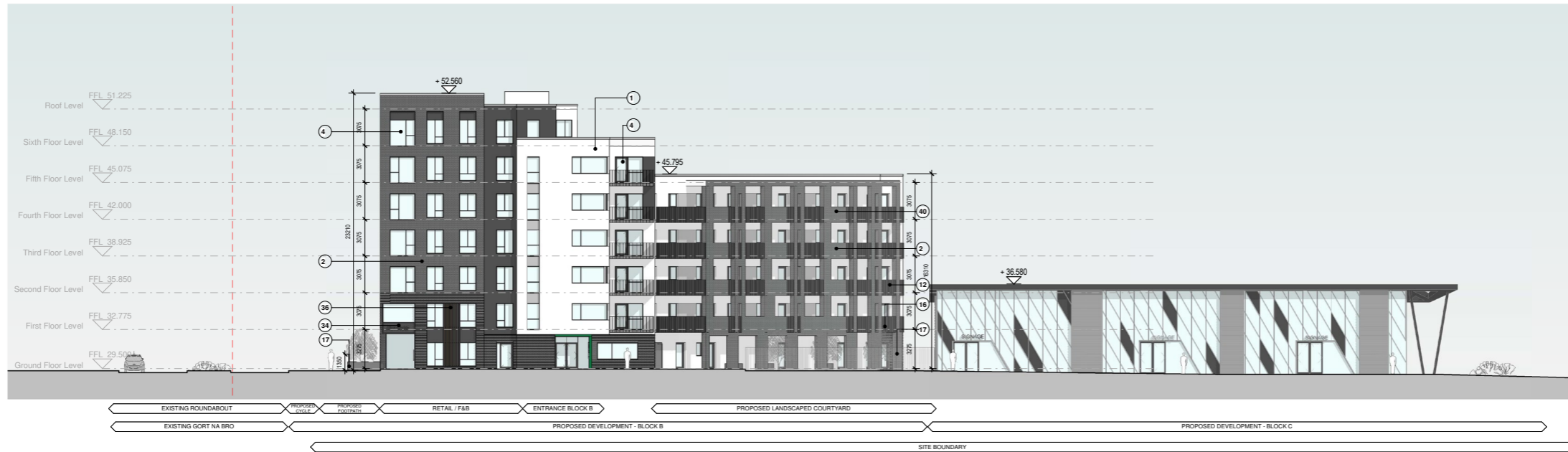


2 BLOCK B - NORTH FACADE
1 : 200

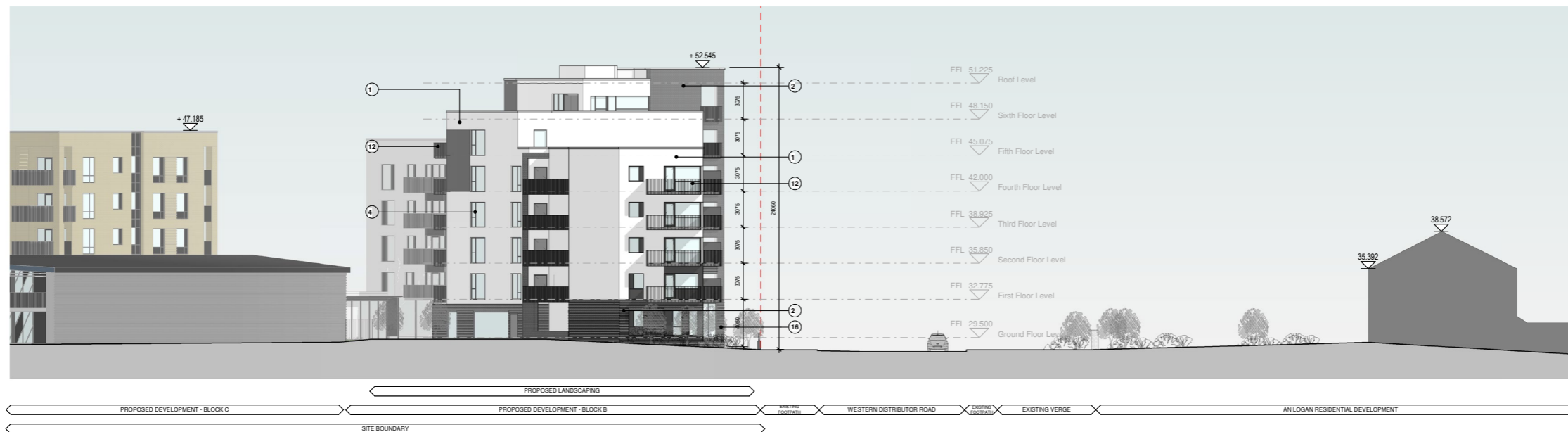
Appendix A - Elevations

Materials for Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 3 Selected Metal Roof Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 10 Selected Entrance Canopy.
- 12 Selected Steel Railings To Balconies.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 17 Wall & Railings. Refer to Landscape Architects Drawings.
- 23 Own-Door Access Units.
- 32 Residential Block Entrance.
- 35 Selected Metal Louvered Screen.
- 36 Selected Metal Fins/Brise-Soleil.

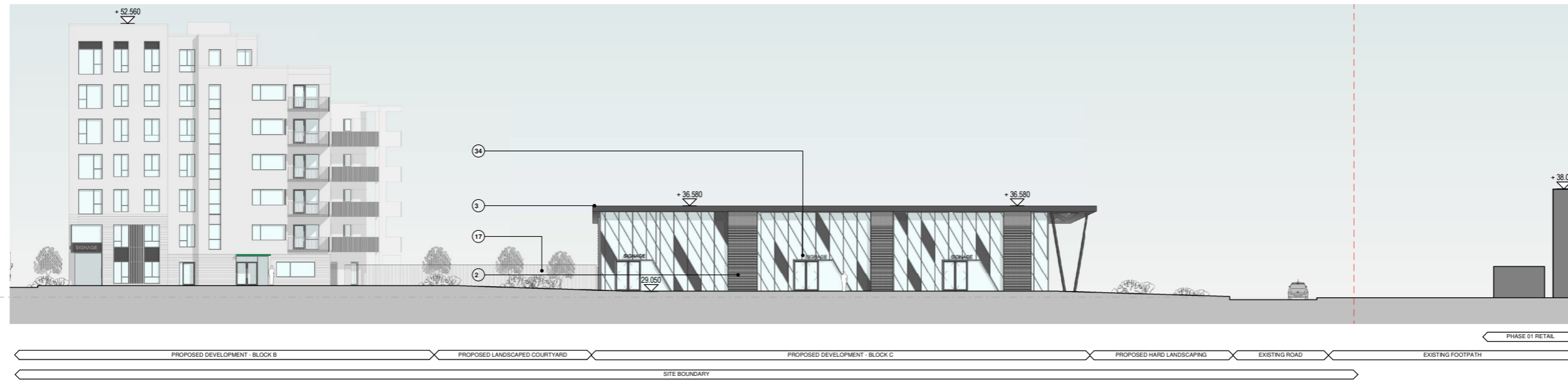


3 BLOCK B - NORTH EAST FACADE ALONG PEDESTRIAN ROUTE
1 : 200



4 BLOCK B - WEST FACADE
1 : 200

Appendix A - Elevations

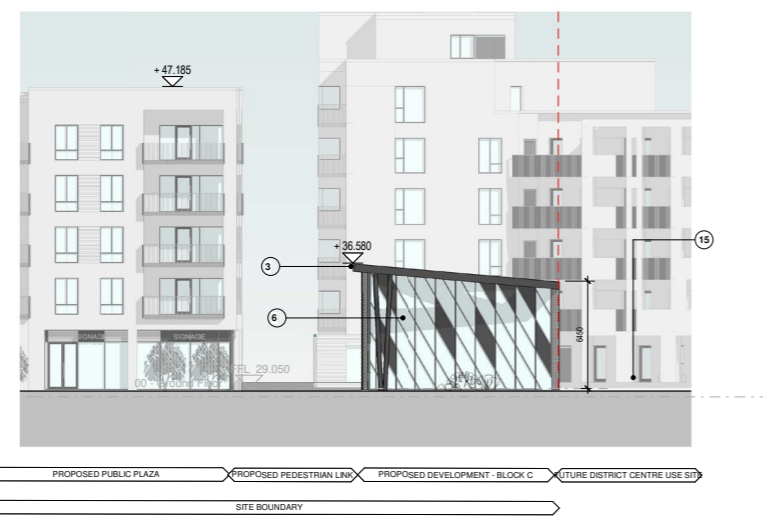


- Materials for Development**
- 2 Selected Brick Finish.
 - 3 Selected Metal Roof Finish.
 - 4 Selected Windows & Doors.
 - 6 Selected Polyester Powder Coated High Performance Glazing System.
 - 15 Future District Centre Use Site. Subject to Future Planning Application.
 - 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
 - 17 Wall & Railings. Refer to Landscape Architects Drawings.
 - 34 Retail / F+B Signage.

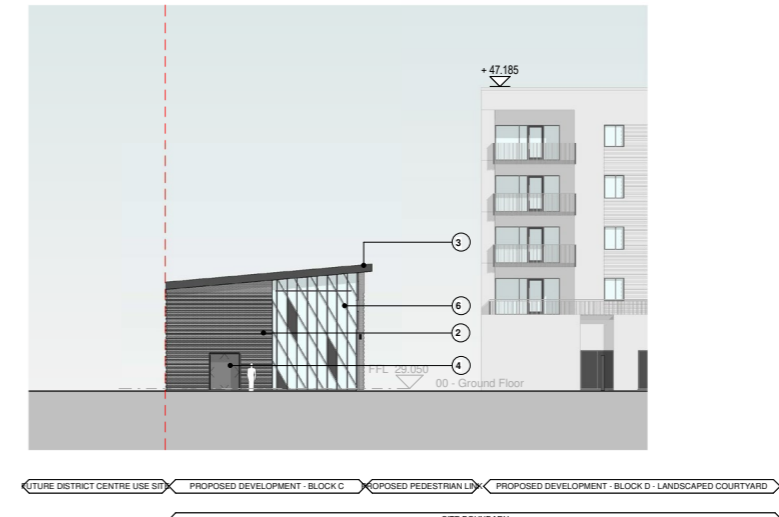
1 BLOCK C - NORTH FACADE - FACING PUBLIC PLAZA
1 : 200



2 BLOCK C - SOUTH FACADE
1 : 200



3 BLOCK C - SIDE ELEVATION FACING ROAD
1 : 200



4 BLOCK C - SIDE ELEVATION FACING BLOCK B
1 : 200

Appendix A - Elevations

Materials For Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 12 Selected Steel Railings To Balconies.
- 13 Selected Solid Balustrade To Balconies.
- 14 Access Gates.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 32 Residential Block Entrance.
- 33 Service Ventilation Grills.
- 34 Retail / F+B Signage.
- 36 Selected Metal Fins/Brise-Soleil.
- 41 Selected Stone Cladding.



1 BLOCK D - WEST FACADE ALONG EXISTING ROAD
1 : 200



2 BLOCK D - EAST FACADE ALONG LANDSCAPED COURTYARD
1 : 200

Appendix A - Elevations

Materials For Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 12 Selected Steel Railings To Balconies.
- 13 Selected Solid Balustrade To Balconies.
- 14 Access Gates.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 32 Residential Block Entrance.
- 33 Service Ventilation Grills.
- 34 Retail / F+B Signage.
- 36 Selected Metal Fins/Brise-Soleil.
- 41 Selected Stone Cladding.



3 BLOCK D - NORTH FACADE ALONG PROPOSED LINK ROAD
1 : 200



4 BLOCK D - SOUTH FACADE ALONG PROPOSED PEDESTRIAN LINK
1 : 200

Appendix A - Elevations



1 BLOCK E - WEST FACADE ALONG EXISTING ROAD
1:200



2 BLOCK E - EAST FACADE
1:200

Materials for Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 12 Selected Steel Railings To Balconies.
- 13 Selected Solid Balustrade To Balconies.
- 14 Access Gates.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 25 Landscaped Podium over Parking.
- 33 Service Ventilation Grills.
- 34 Retail / F+B Signage.
- 36 Selected Metal Fins/Brise-Soleil.
- 38 Selected Carpark Ventilation Grills.
- 39 Selected Development Signage.
- 41 Selected Stone Cladding.

Appendix A - Elevations



3 BLOCK E & F - NORTH FACADE ALONG EXISTING PEDESTRIAN LINK
1 : 200

Materials for Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 12 Selected Steel Railings To Balconies.
- 13 Selected Solid Balustrade To Balconies.
- 14 Access Gates.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 25 Landscaped Podium over Parking.
- 33 Service Ventilation Grills.
- 34 Retail / F+B Signage.
- 36 Selected Metal Fins/Brise-Soleil.
- 38 Selected Carpark Ventilation Grills.
- 39 Selected Development Signage.
- 41 Selected Stone Cladding.
- 42 Opaque Glass Screen.



4 BLOCK E & F - SOUTH FACADE ALONG PROPOSED LINK ROAD
1 : 200

Appendix A - Elevations

Materials for Development

- 1 Selected Nap Render Finish.
- 2 Selected Brick Finish.
- 4 Selected Windows & Doors.
- 6 Selected Polyester Powder Coated High Performance Glazing System.
- 12 Selected Steel Railings To Balconies.
- 13 Selected Solid Balustrade To Balconies.
- 16 Proposed Landscaping. Refer to Landscape Architects Drawings.
- 17 Wall & Railings. Refer to Landscape Architects Drawings.
- 25 Landscaped Podium over Parking.
- 36 Selected Metal Fins/Brise-Soleil.
- 38 Selected Carpark Ventilation Grills.
- 39 Selected Development Signage.
- 42 Opaque Glass Screen.



3 BLOCK F - EAST FACADE ALONG GORT NA BRO
1 : 200



4 BLOCK F - WEST FACADE
1 : 200