The Meadows Bessborough

RIAI

SHiPSEYBARRY

MASTERPLANNING | URBANISM | ARCHITECTURE

RIBA

ARCHITECTURAL DESIGN STATEMENT

commissioned by ESTUARY VIEW ENTERPRISES 2020 LTD

MARCH 2022

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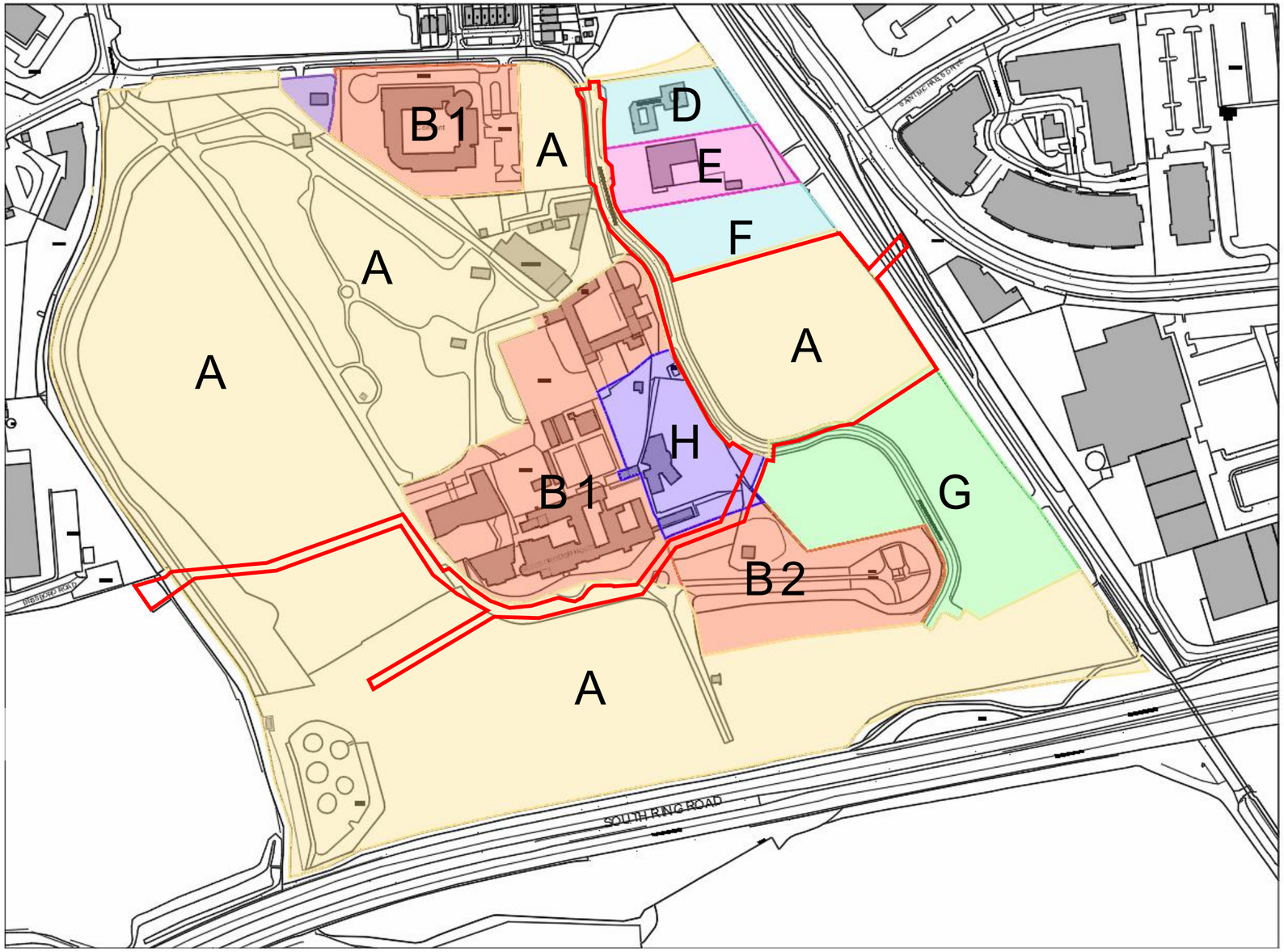
Introduction

PROJECT

SHiPSEYBARRY were appointed by ESTUARY VIEW ENTERPRISES 2020 LTD (EVE) in early 2021 to design a residential 'Build to Sell ' scheme at the subject site – The Meadows (PHASE 1) in Bessborough. The application sites represents 1 of 2 sites (phase 1 & phase 2) scheduled for submission in 2021. The scheme proposal is to the south of the other scheduled application (The Farm –PHASE 2). Zoning on the site permits residential in an area designated as high landscape value. This combined with the proposed CMATS rail linkage nearby provides an ideal location for new sustainable communities to emerge.

The development consists of 280 build to sell apartments, associated supporting uses, a 35 child creche facility, communal open space areas, landscaping, under-podium and on-street car parking spaces, bicycle parking spaces, bin stores, public lighting and all ancillary site development works. The development also consists of a new pedestrian and cycle way bridge connecting the site to the passage west greenway to the eastern boundary. The development is arranged around 4 main L-shaped blocks, Builds A, B, C & D with a central spine public route running East-West. A raised landscape podium is located to the south of this route .Building heights range form 1 - 10 storeys at varying locations.

Overleaf is an overview of the proposal and design teams approach to the site for the Boards consideration set out under critical headings around the design. - SHiPSEYBARRY



SITE OWNERSHIP

A EVE (APPLICANT) LAND OWNERSHIP - 40.3 ACRES

B 1 Convent Congregation of the Sacred Hearts of Jesus and Mary

B2 Convent Congregation of the Sacred Hearts of Jesus and Mary - 2.75 Acres

D HSE

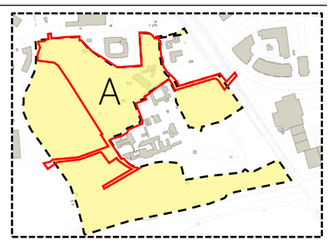
E ALZHEIMERS SOCIETY

F HSE

G MWB TWO LTD.

H BESSBOROUGH CRECHE

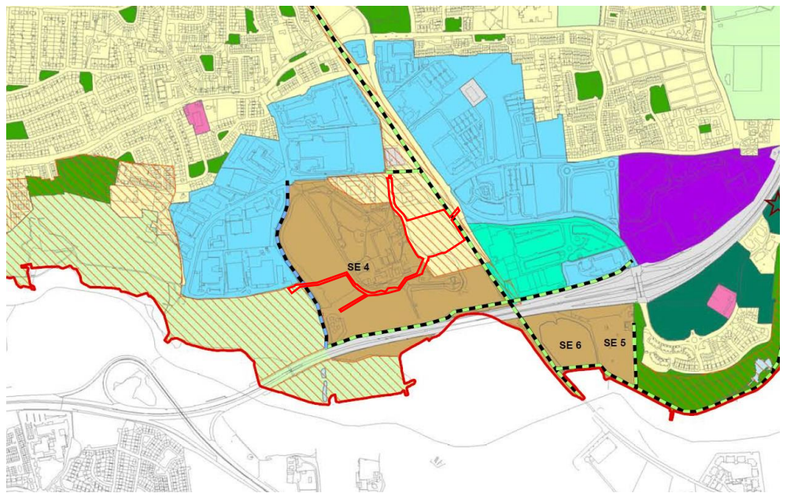
Lands A are owned by ESTUARY VIEW ENTERPRISES 2020 LIMITED – the applicant. Lands A represent approximately 40.3 acres . Lands are fully serviced and accessible to adjoining greenway & road networks .



POLICY AND ZONING

CORK CITY DEVELOPMENT PLAN 2015-2021

Zoning on the site permits residential in an area designated as high landscape value. This combined with the proposed CMATS rail linkage nearby provides an ideal location for new sustainable communities to emerge.



12-landscape preservation zone

Areas of high landscape value

4- residential, local services and industrial uses

Amenity routes

Proposed new amenity routes / upgrades

SE-4 Bessborough House J.G.C.B.

1. To re-instate historic landscape.
2. To seek use of grounds as a neighbourhood park in context of the local areas plan (H).
3. To allow development within the immediate environs to the north of Bessborough house consistent with the landscape and protected structure of the site.

APPLICATION SITE

CMATS LIGHT RAIL INDICATIVE ROUTE

CMATS BUS CORRIDOR

CMATS LIGHT RAIL STATIONS

GREEN WAY TO CITY

10 MINUTE WALKING TIME

MAHON

TECH PARK

MAHON INDUSTRIAL ESTATE

CITY GATE

BESSBOROUGH

MAHON POINT

DOUGLAS EAST

ESTUARY

JACOBS ISLAND

PLACE MAKING

Stakeholder engagement

BESSBOROUGH SURVIVOR ENGAGEMENT - CSSA

The site is located on a portion of the lands that formed the extensive former Bessborough estate and totalling approximately 200 acres to include lands to the north east and west of the site. These original estate lands include adjoining new ownerships now used for a range of activities from a golf club to the west, to greenway, retail, medical and office use to the east and new residential to the north.

A significant portion of the environs history is when Bessborough House to the south of the site operated as a Mother & Baby Home from 1922 to 1999. Given the sensitivity associated with the location and survivors concerns as presented at the recent oral hearing to the Gateway View application (2021), engagement was sought with the CSSA (Cork Survivors & Supporters Alliance) from an early design stage in the design process.

Fig.1 – outline early stage masterplan

Meeting 1- June 2021 at SHiPSEYBARRY Offices : the Promoter, their Architect and representatives of the CSSA met to discuss potential development across the site in ownership of EVE. A high level masterplan approach was presented to the CSSA with development proposed to the north east and western lands while the southern portion of the park would be given over to a remembrance park (see fig.1).

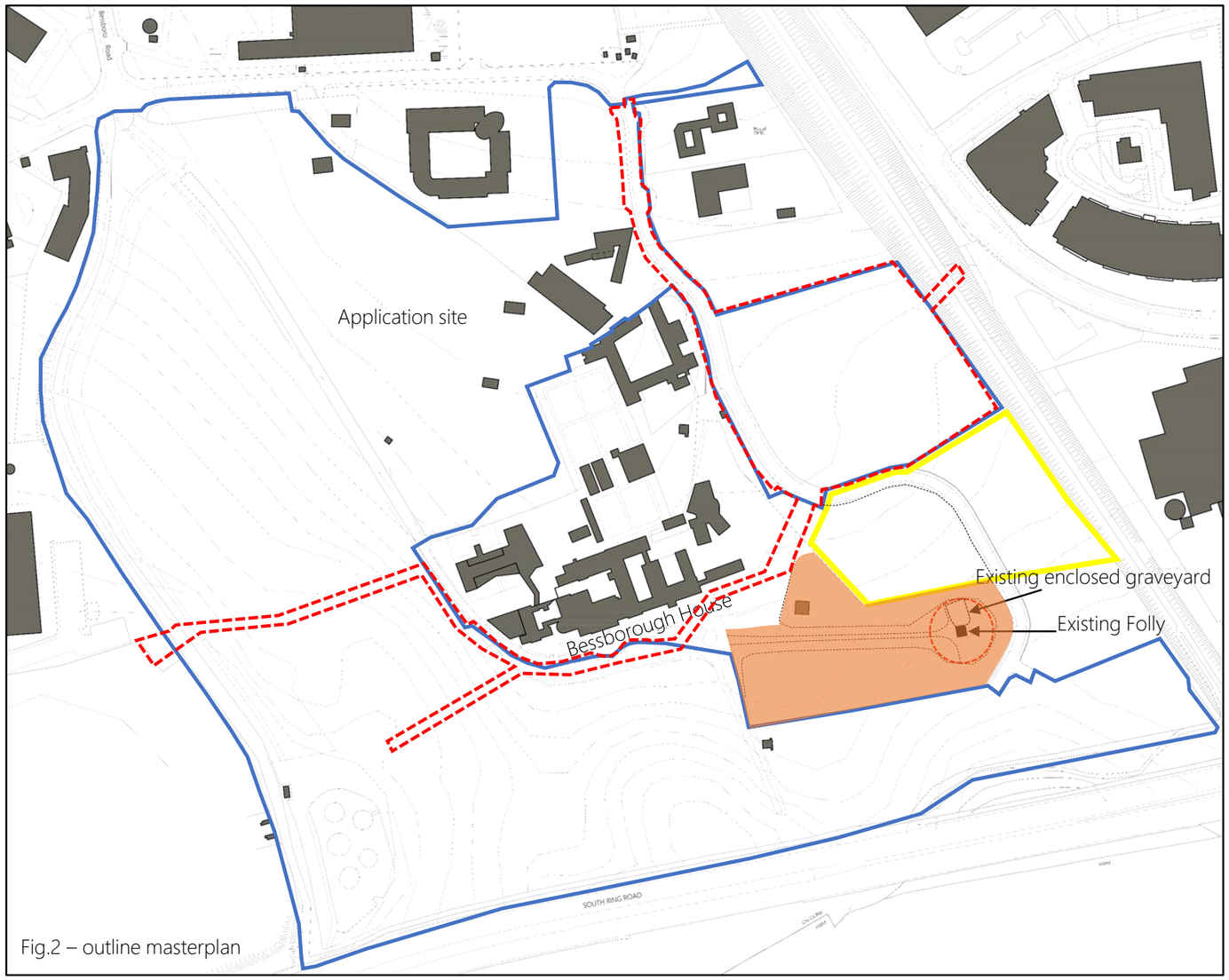


Fig.2 – outline masterplan

Meeting 2 - June 2021 on site at Bessborough : the Promoter, his Architects, and representatives of the CSSA met on site for a walk around. The CSSA showed the areas of concern in detail and communicated their aspirations for a memorial location both currently outside the CSSA and applicants control. The CSSA re-iterated their position as not being opposed to development on the wider site, as stated publicly previously, and their primary concerns and ambition relate to the areas highlighted at the site visit (represented in Fig.2). Their preference is for no ground disturbance in these areas and the location to be memorialised and protected for survivors, family's and the public to visit. The CSSA also stated the EVE proposed development locations were not of direct concern to their sensitivities.

Meeting 3 – January 2022 on site at Bessborough - the Architect and representatives of the CSSA walked area for scheduled ground investigation works for drainage assessments. The CSSA met on site with a Forensic Archaeologist and an Osteo Archaeologist to discuss practice and methodologies in areas of investigation.

Meeting 4 – March 2022 at SHiPSEYBARRY offices with the promoter, the Architect and the CSSA representatives. The Architects presented the submission ahead of application submission.

Area as identified by CSSA of concern – outside EVE ownership

Area the CSSA use currently for remembrance/ceremonies

Location of MWB TWO LTD SHD application with Oral Hearing

Applicant ownership - EVE

PHASE 2 ' The Farm ' application boundary


NORTH FIELDS
THE FARM
CITY GREENWAY
Zoned Lands
THE MEADOWS
BESSBOROUGH HOUSE
Zoned Lands
FOLLY
REMEBRANCE PARK -13.6 ACRES

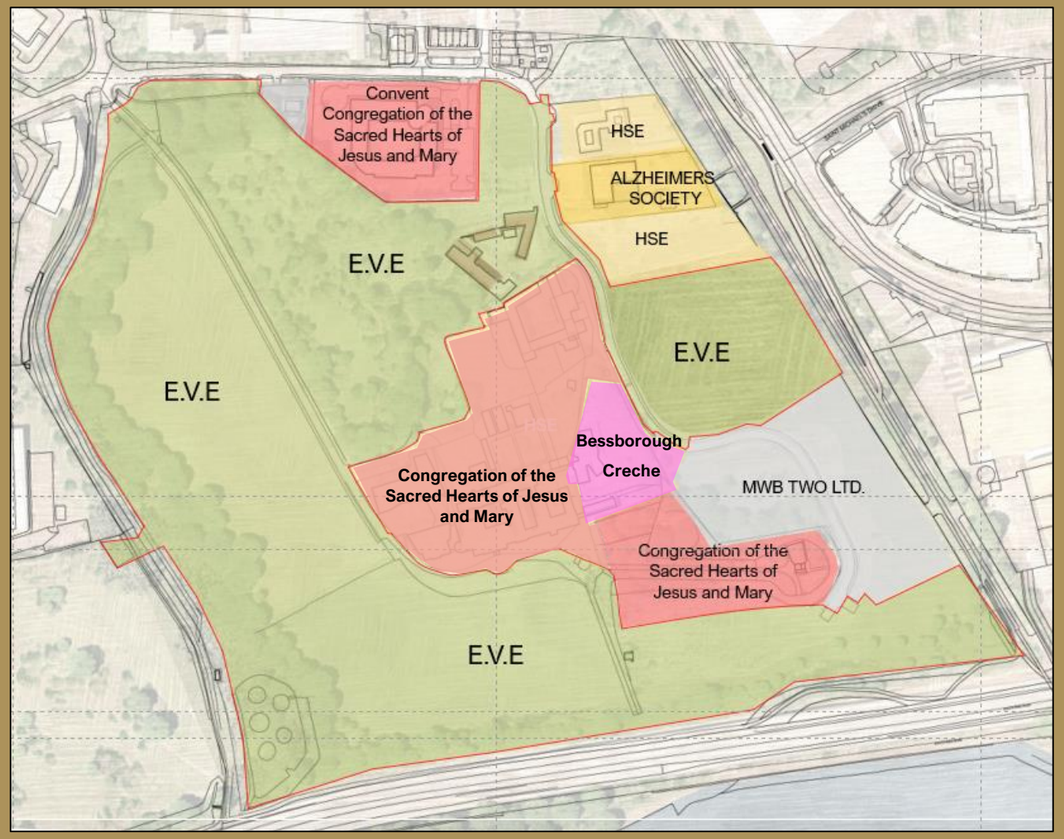
BESSBOROUGH MASTERPLAN

E.V.E, the promoters land holding extends to approximately 40.3 acres across part of the former Bessborough Estate. Other primary land holdings are principally held by The Congregation of the Sacred Hearts of Jesus and Mary, the H.S.E. and the Alzheimer's society. Given this the E.V.E land holding provided an opportunity to 'open up the privately held land bank to offer a large publicly accessible amenity parkland setting with new communities integrated into this highly accessible location. Given the zoning objects, heritage landscape setting and area specific parameters, the extent and nature of any new development results in a variety of development approaches which serve to address each specific areas constraints and opportunities. The proposed masterplan is composed of a number of these areas which have location specific approaches to design and assembly while integrating to a wider considered approach to the over-all site.

Within the E.V.E holding and masterplan, there are 5 areas identified as having specific criteria for design approaches responding to their immediate and wider site considerations. Though these areas have varied Architectural scales and expression, all these areas are designed to integrate, compliment and connect with each others locations and design philosophy to offer a coherent masterplan approach to the larger site.

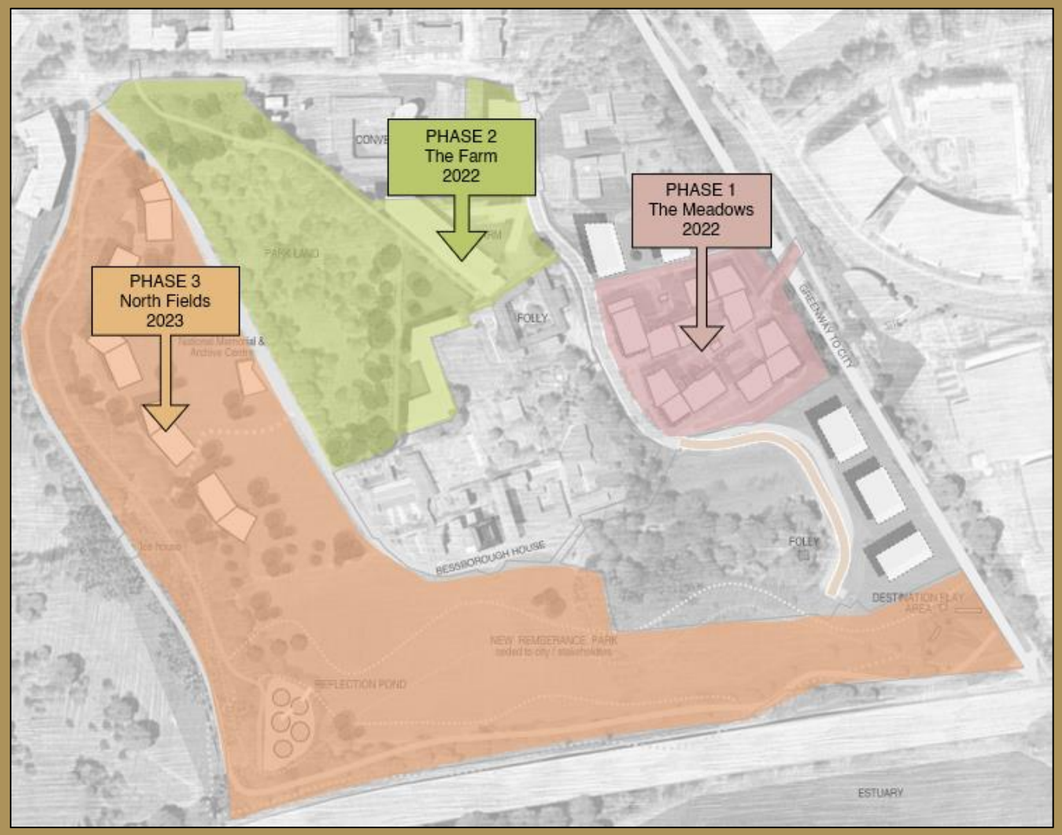

CONVENT
FARM
PARK LAND
NORTH FIELDS
Farm Girls
Memorial
National Memorial &
Record Centre
STABLES
GREENWAY TO CITY
Zoned Lands
BRIDGE
THE MEADOWS
SITE
Zoned Lands
Icehouse
BESSBOROUGH HOUSE
FOLLY
DESTINATION PLAY
AREA
NEW REMEMBRANCE PARK
ceded to city / stakeholders
REFLECTION POND
ESTUARY


THE FARM
THE MEADOWS
NORTH FIELDS
BESSBOROUGH HOUSE
Zoned Lands
REMEMBRANCE PARK
N40 SOUTH RING ROAD
ESTUARY



SITE OWNERSHIP

Lands in GREEN are owned by ESTUARY VIEW ENTERPRISES 2020 LIMITED – the applicant. These Lands represent approximately 40.3 acres. Lands are fully serviced and accessible to adjoining greenway & road networks .



PROJECT PHASING

The masterplan is delivered over 3 planning applications with PHASES 1 & 2 running concurrently in 2022 and the PHASE 3 application to follow after. A new bridge proposal to the greenway is captured in both Phase 1 & Phase 2 applications to address the issue of independent connectivity being made available to each application. Phase 3 is currently at a preliminary design stage and may alter on full engagement with Cork City Council.

POLICY AND ZONING

CORK CITY DEVELOPMENT PLAN 2015-2021

The Masterplan area has a 2 principle zonings across the EVE holding, which are in an area of high landscape value. Residential zonings are in are across 2 of the proposed phases (phase 1 & 2) with phase 2 having a significant portion of SE4 Zoning. Phase 3 is entirely within SE4 zoning.

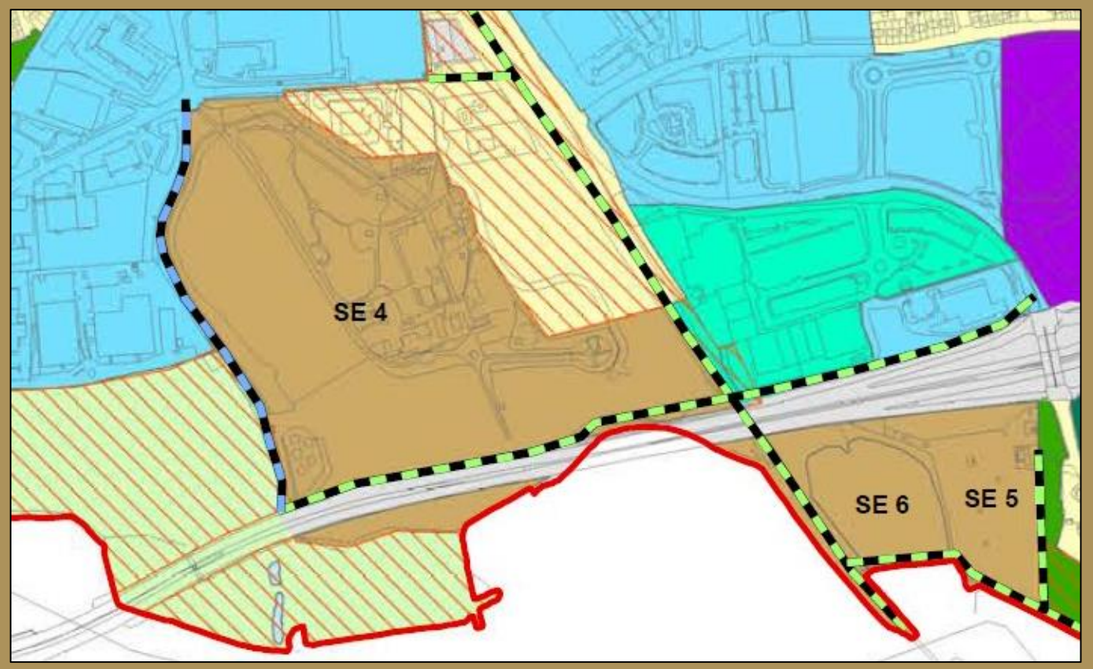


DIAGRAM OF PHASES AND ZOINING

12-landscape preservation zone

Areas of high landscape value

4- residential, local services and industrial uses

Amenity routes

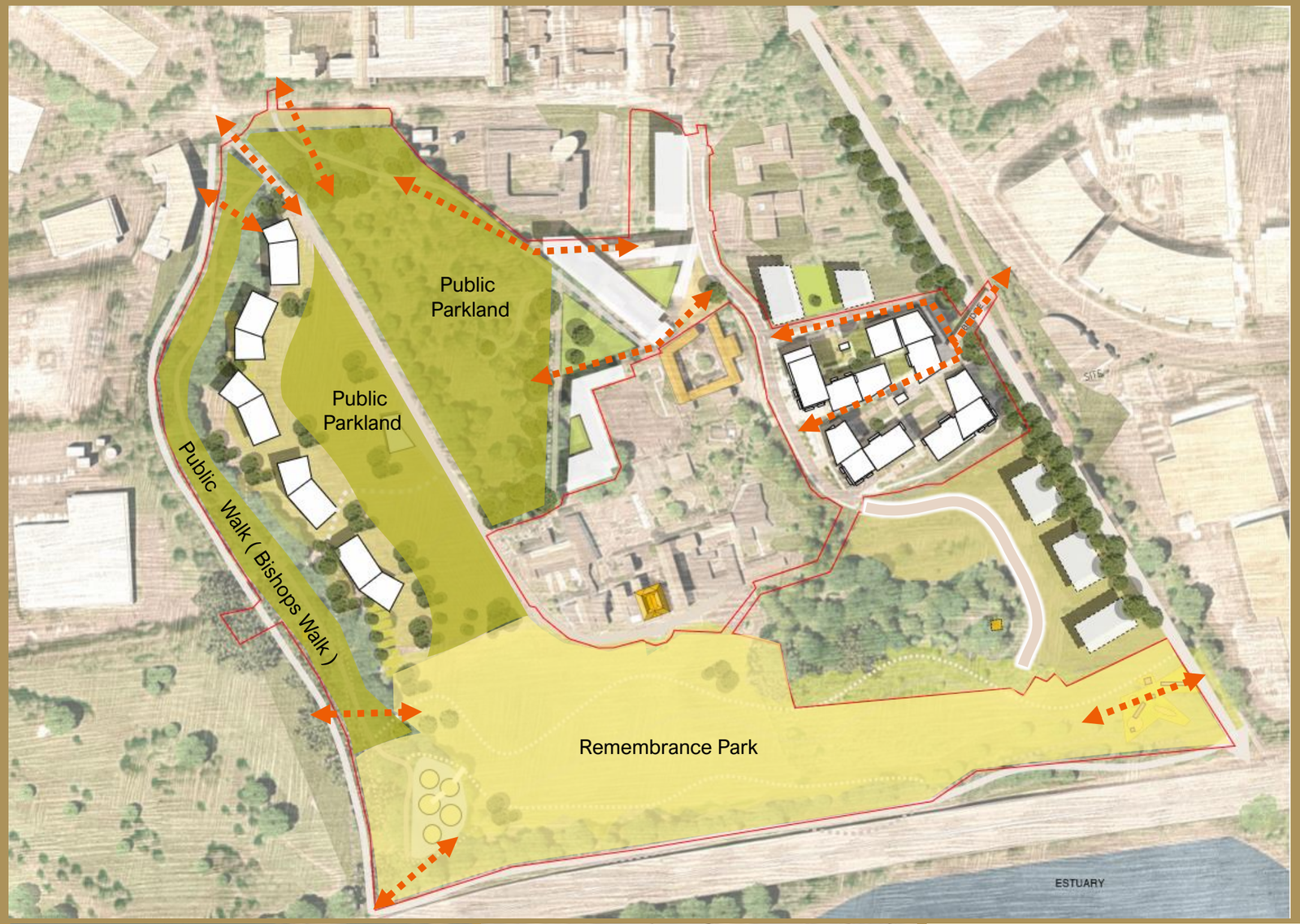
Proposed new amenity routes / upgrades

SE-4 Bessborough House J.G.C.B.

1. To re-instate historic landscape
2. To seek use of grounds as a neighbourhood park in context of the local areas plan (H) .
3. To allow development within the immediate environs to the north of Bessborough house consistent with the landscape and protected structure of the site.

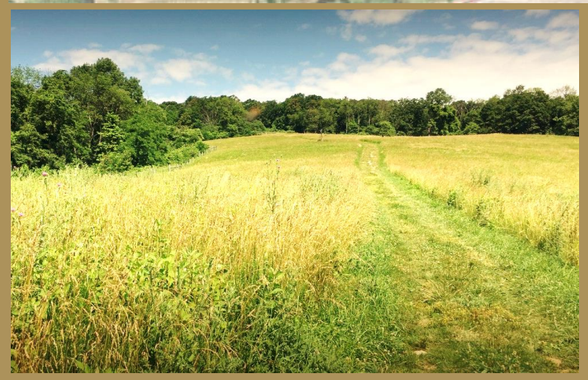
The specific zoning objectives are addressed in phased applications across the masterplan :

- Phase 1 - is a residential scheme designed to be cognisant of the location in an area of high landscape value.
- Phase 2 - has both residential zoning in an area of high landscape value and SE4 zoning. With regard to SE4 it delivers elements of reinstatement of historic landscape while also development being in the environs to the north of Bessborough House.
- Phase 3 - has SE4 zoning across its entirety. It delivers elements of reinstatement of historic landscape, has development to the environs to the north of Bessborough House and delivers Neighbourhood Park objective.

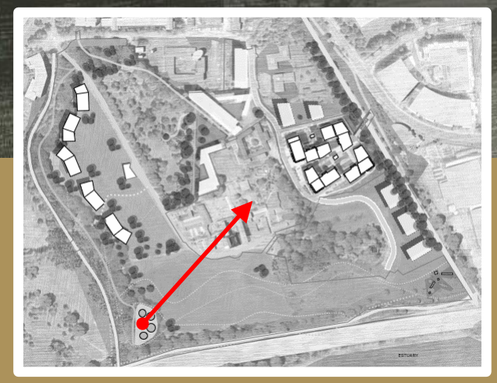


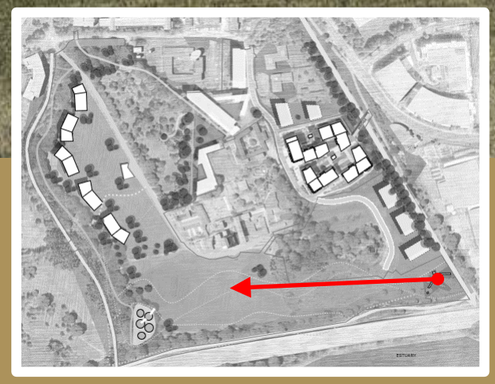
THE OPENING UP

Critical to assessing the potential of the is the core vision to offer substantial tracks of land to be made 'open' and accessible to the public. In Phase 2 significant parkland (6 acres) is made accessible to the north of Bessborough House while in Phase 3, ' The Bishops walk is made accessible, A Northern Parkland is provided and notably, to the south, 13.6 acres are provided to accommodate the Neighbourhood park objective as a remembrance park to be ceded to the City/Stakeholders in the future. The extent of public amenity adjoining new development proposals is made feasible by achieving the order of quantum of development as proposed within the promoters portion of the masterplan lands.

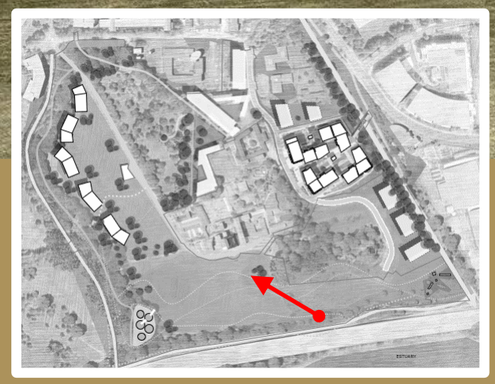


Concept view of the historic reflection pond with proposed clearance and renewed viewability of the main house across the remembrance park to the south



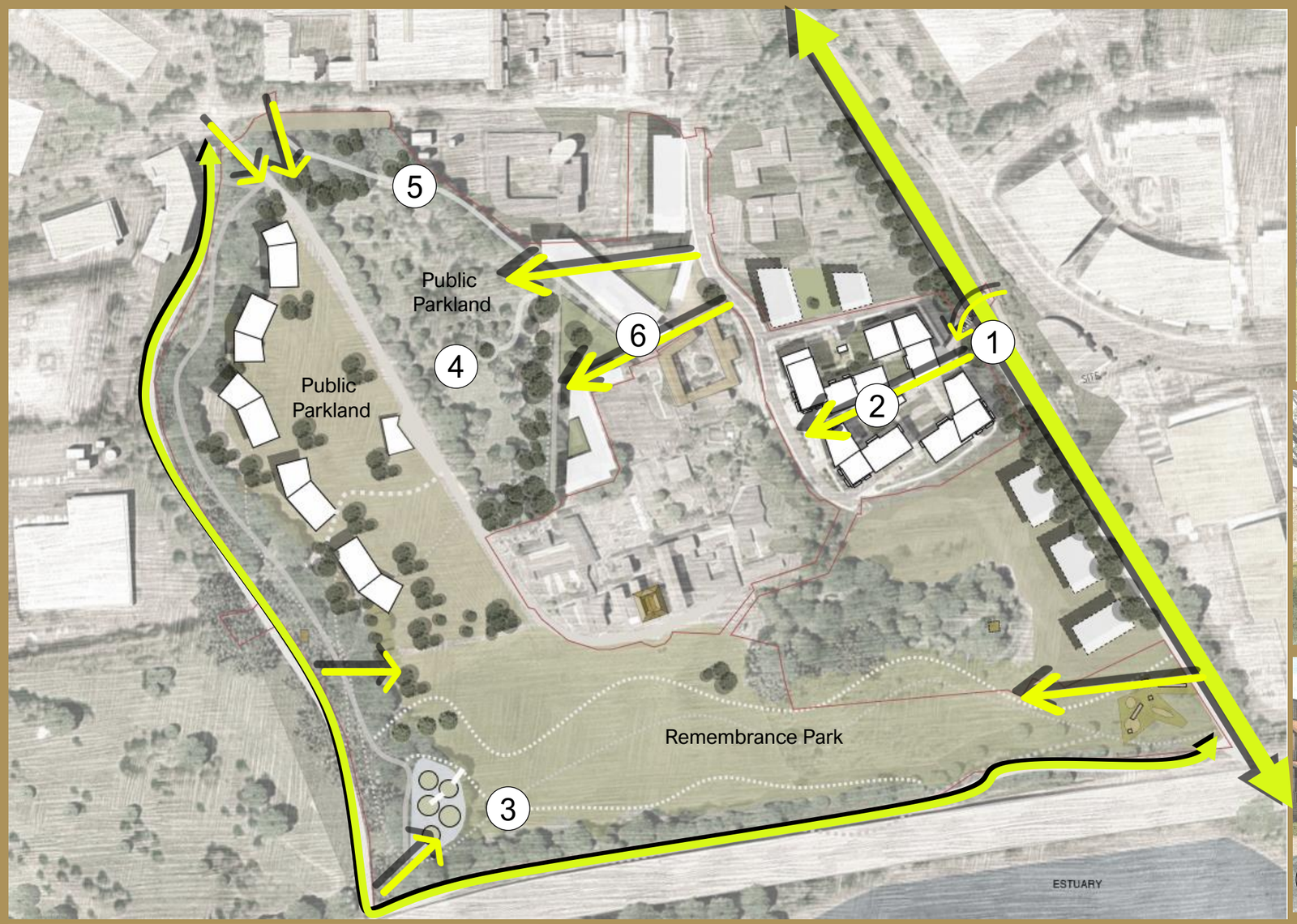


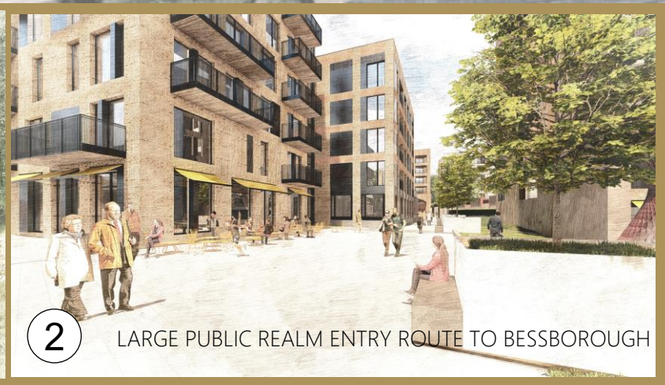
Concept view of eastern access point to new remembrance park looking west

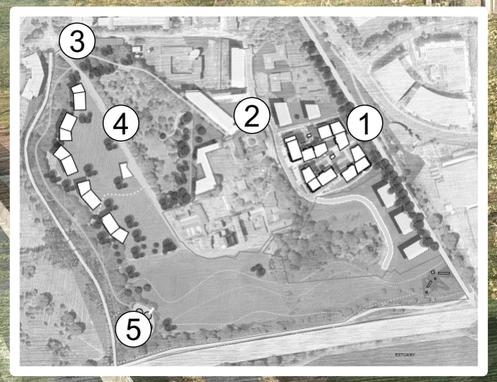


Concept view of new remembrance park looking west with Bessborough House to centre and phase 3 and phase 2 to the left and right respectively

PERMEABILITY







New access bridge to greenway 1

3 New pedestrian access to North (restored)

4 Pedestrianised main avenue

Northern Park and North Fields beyond

2

New Plaza leading to the
North Park and North Fields

5 Access to remembrance park near reflection pond form western greenway

HISTORICAL SPECIAL CHARACTER AREAS

Across the Masterplan area, a number of special character areas are present which are informed by the historic context and arrangement of the hierarchy and designed layout of the original estate. When analysing these character areas it is apparent that varying design responses are required to retain and enhance the original landscape intent of the estate. In arriving at the assessment of areas, the design team is lead by Forest Bird's historic landscape assessment report (included in EIAR Appendix 3-4).

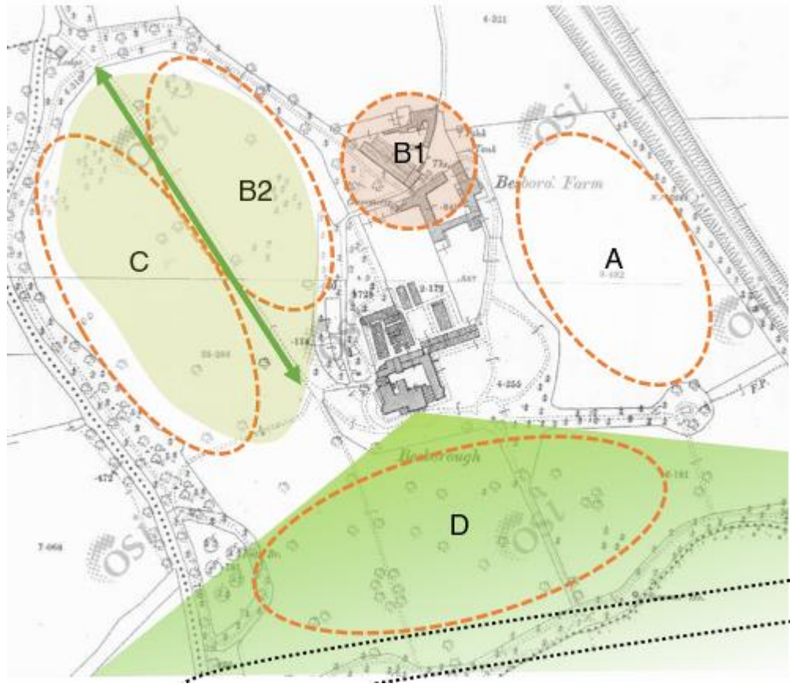
AREA A – Eastern Meadow area sits between the historic arrangement of Bessborough house, its walled gardens secondary edged out buildings and farm complex to its west and sinuous carved out rail line on the eastern boundary. These two primary constructed arrangements in the landscape are critical elements to be considered in an new arrangement of buildings to be formed between. Opportunities present to reflect both historical geometries, though not orthogonal, in a composition to reflect and support each arrangement in the landscape. Mature tree buffers on both east and west boundaries allow the site remoteness to sensitive views particularly from south on Bessborough House. Eastern more recent commercial development scales in proximity on the greenway boundary suggest a more dense scale in this location.

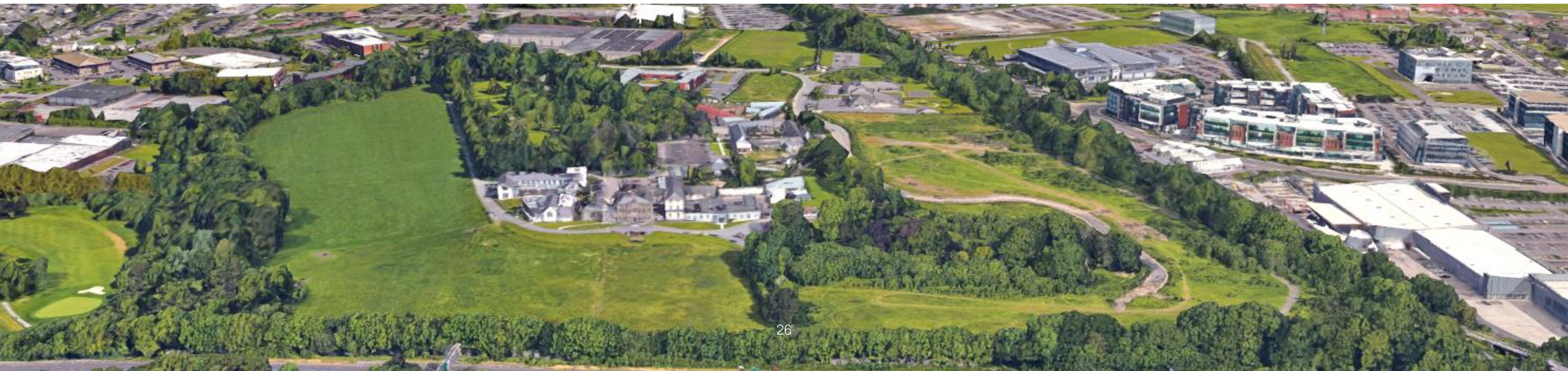
AREA B1 – The Farm complex has a well defined building arrangement and scale which is unique to the site. Any development in this location needs to support and enhance the original enclosure intent of the complex and retain the formed boundary to the Park to the west (AREA B2). An assessment of quality and significance of the buildings is needed to plan any intervention in this area.

AREA B2 - The is Area along with Area C formed the main open processionary landscape to the main avenue from the gates to the main residence. While not open spatially anymore given planting in the late 20th century, dissolving its intent, the area should remain as a perceived unbuilt area with care given to the recent Arbo setting.

AREA C – Similarly this area should retain a sense of openness of the avenue, should be modest in scale and height as it is more exposed and legible than other areas suitable for development.

AREA D – The most sensitive area and not suitable for development forms the main open prospect from the main residence and conversely the residence is given an uninterrupted dominant presence in the landscape when viewed from the south .





1 . (Phase 2) currently closed off access with block work wall restored to its original open east connection and dialogue.

2. (Phase 2) Since lost perimeter park routes re-established with 1980's landscape interventions removed.

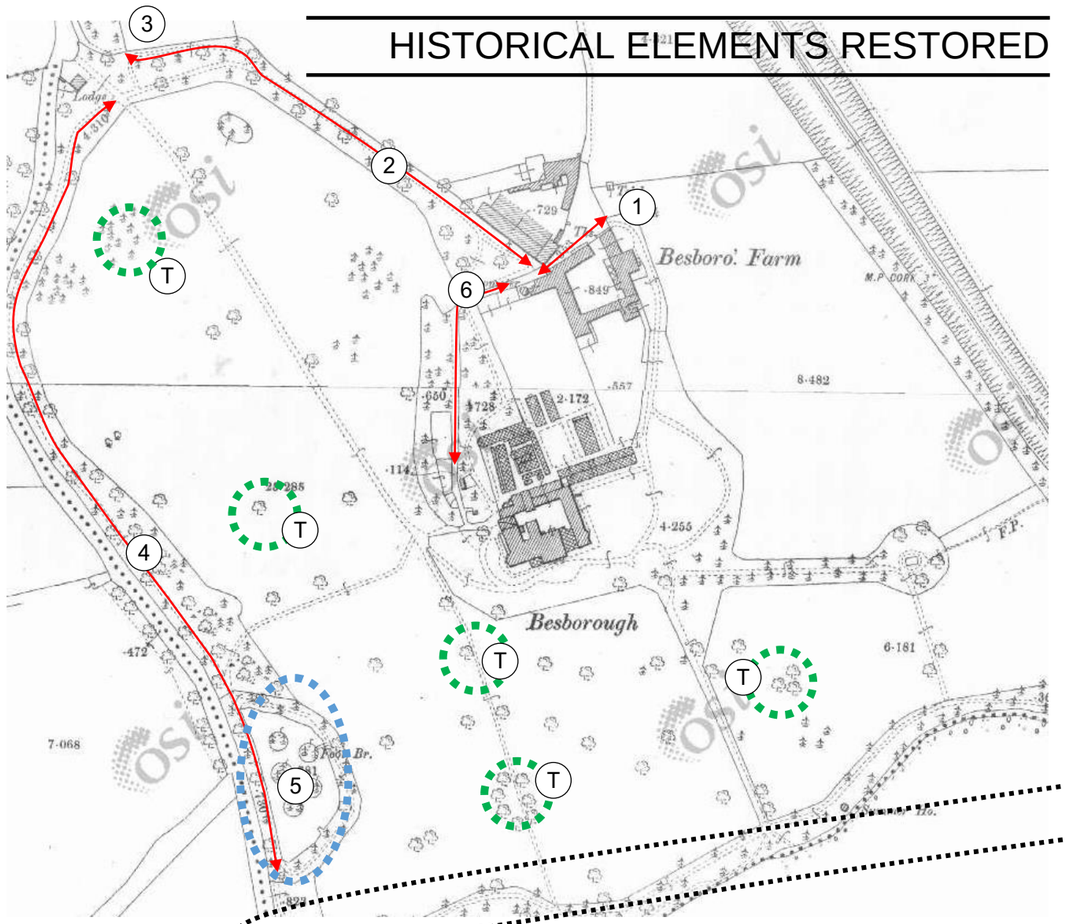
3. (Phase 2) pervious access beyond estate walls re-established.

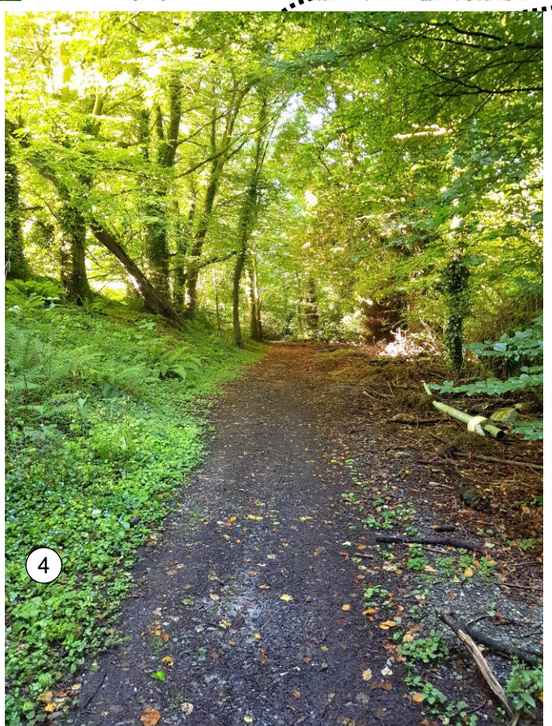
4. (Phase 3) 'Bishops walk ' restored and re-established and made publicly accessible.

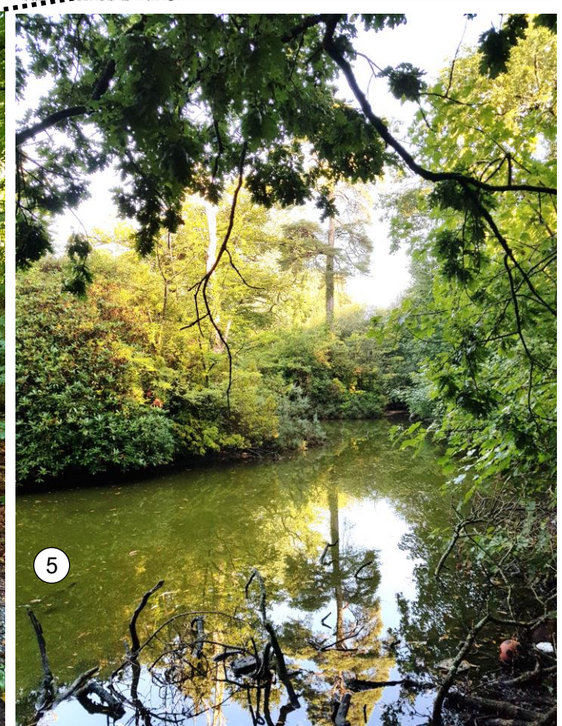
5. (Phase 3) Pond area restored to former landscape feature status.

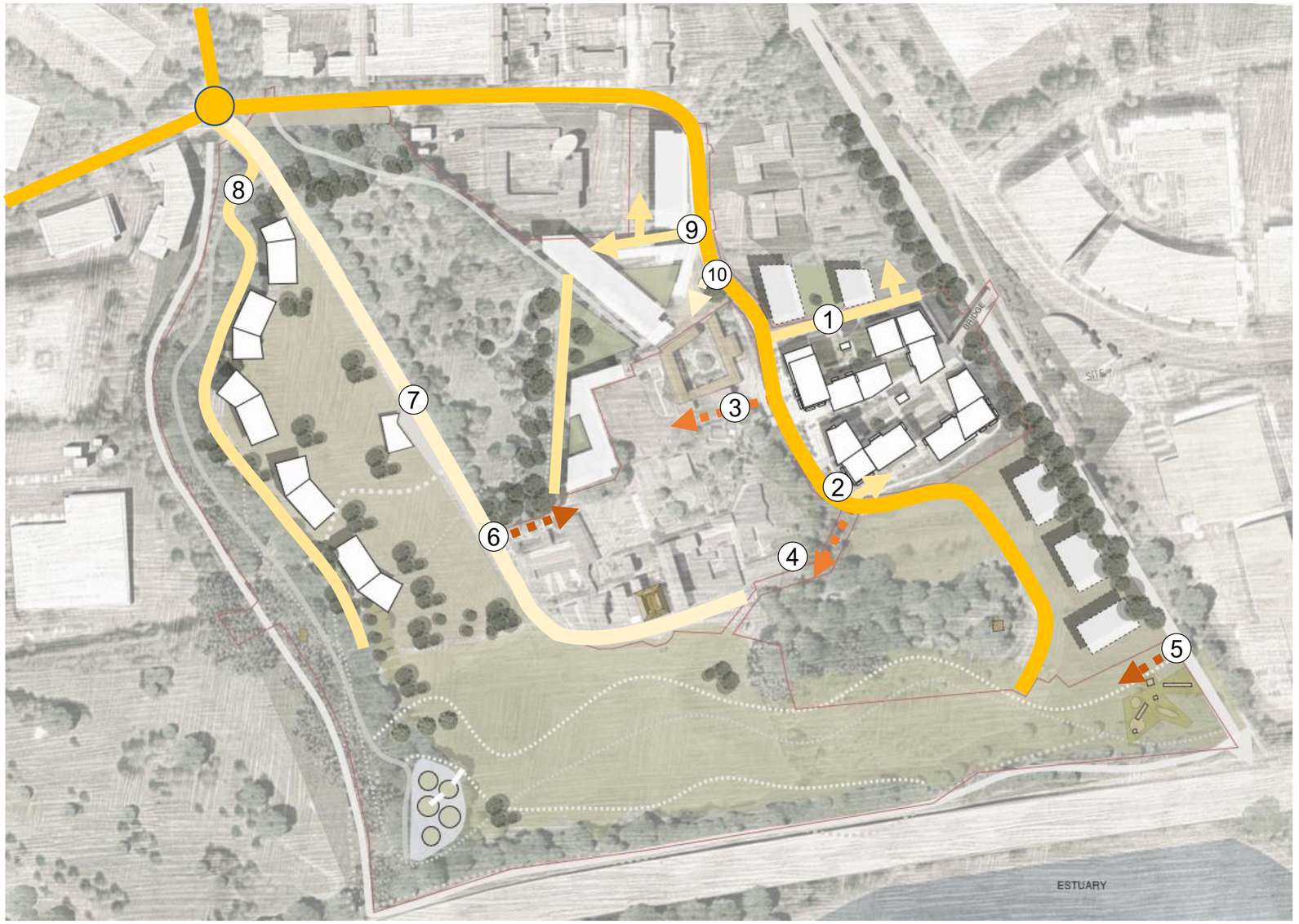
6. (Phase 2) Main routes connecting house to farm area re-established and given prominence.

T. (Phase 3) Broadleaf tree clusters re-instated. Indicative only on diagram









PRIMARY EXISTING ROAD NETWORK

New development specific road access

Historic avenue maintained – access to Record centre and emergency access Bessborough house

emergency access Bessborough house

Future creche access & HSE access – subject to planning applications

TRAFFIC ACCESS

1. PHASE 1 – New northern access road offered to be taken in charge.
2. PHASE 1 – Carpark access
3. HSE future access
4. Creche future access and turning / drop off
5. Park emergency & maintenance access
6. HSE emergency access
7. Avenue maintained for records building and emergency access (pedestrian priority)
8. North Fields rear parking / service access

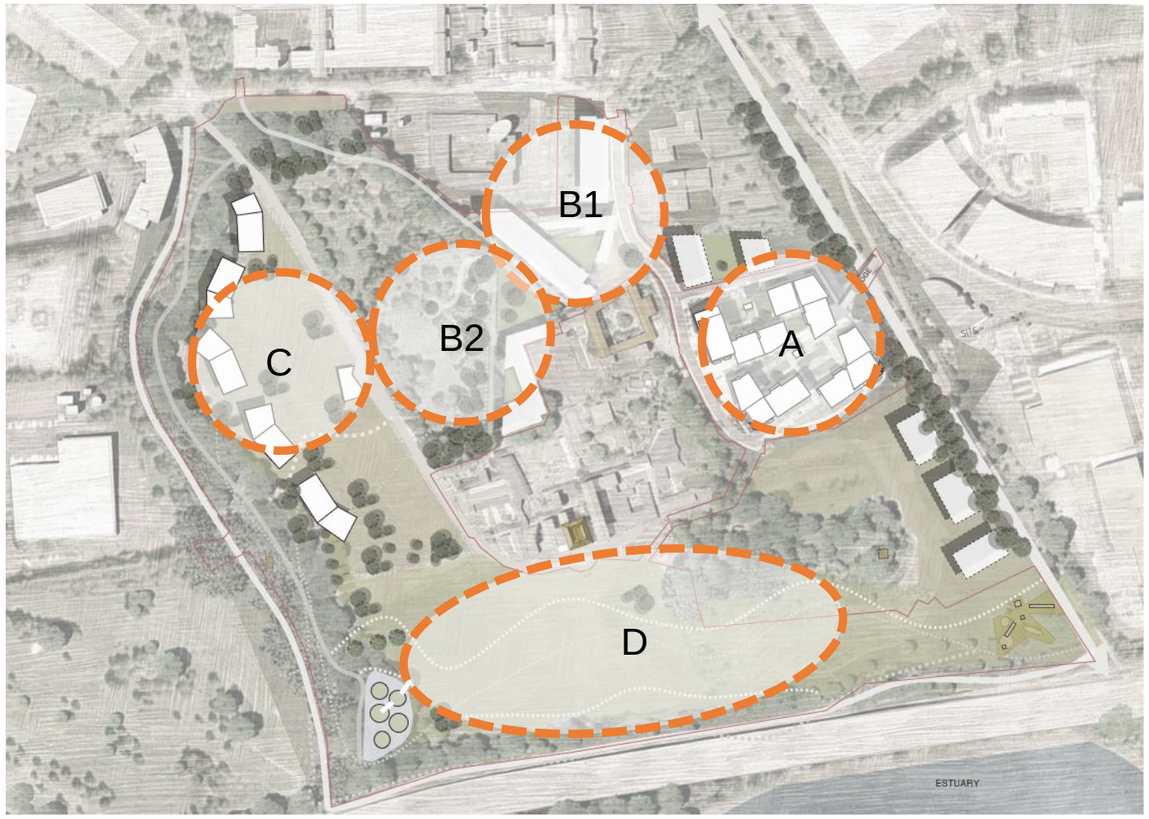
INDIVIDUAL AREAS OF THE MASTERPLAN

The design of any new development within the masterplan area addresses specific local constraints and opportunities to their specific area within the plan . This results in a number of different architectural approaches and typologies across the site which offers a diverse experience and improved placemaking and area identity opportunities . These areas are identified in 4 key areas as follows .

AREA A – The Meadows, is presented as a gateway to the site with a large feature public realm central spine connecting to the greenway to the east via a new bridge access. This location is considered suitable for a more dense typology given the typography and screening of Bessborough house to the west. Its scale reflects the gateway nature of the scheme to the masterplan while also being in close proximity to newer scaled development to the east in Mahon.

AREA B –The Farm, contains 2 area identities within it B1 & B2 ; B1 requiring consideration to the existing farm complex centrally and to the south while B2 responds to a landscape parkland setting with historic routes as generators – development is highly sensitive in this area given these proximities.

AREA C – The North Fields, has an open landscape feel with a mature woodland backdrop. Development here retains and open 'bordered' landscape intent with a different 'parkland architectural expression applied.




Area A


Area B


Area C

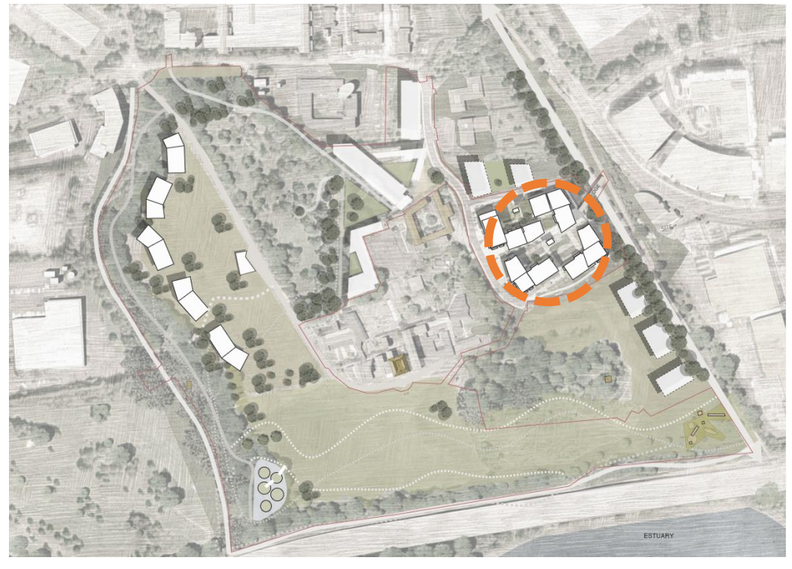
THE MEADOWS – PHASE 1

AREA A – THE MEADOWS

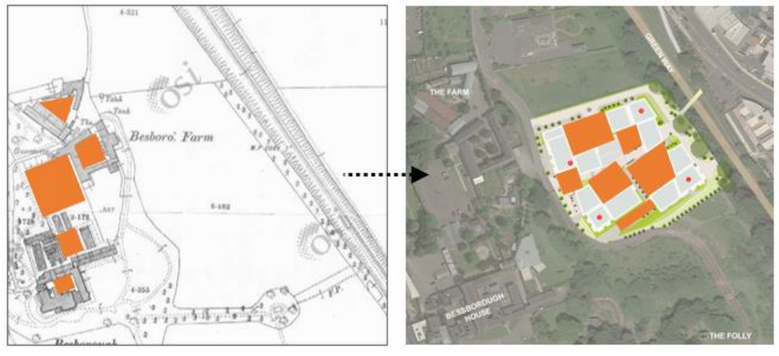
The Meadows is located to the north of residentially zoned lands which is must be considered in assessment of height and distant views. It forms the main gateway to the masterplan with its proximity to the greenway. The site is further bounded to the North by zoned residential lands which transitions in scale to existing buildings further North. This area has significant tree stands to the South West which buffer sensitive views form the parkland to the South. It surrounds a major public realm spine leading to other permeable connection points to the wider site beyond.

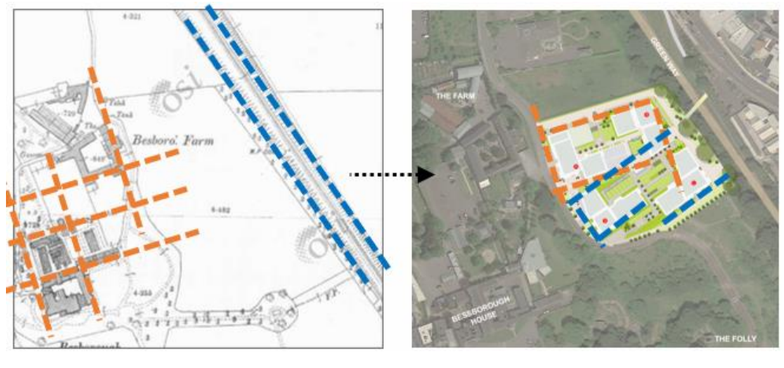
Two strong historical geometries in proximity inform the urban approach with Bessborough House and the former ralline creating a complimentary and angled relationship reflected in the plan form. A sequence of enclosures found in the main Bessborough estate building complex is also interpreted and reflected in the plan arrangement of public and private spaces.

This site is proposed to have 280 residential units with a creche and supporting facilities.



Greenway section looking West



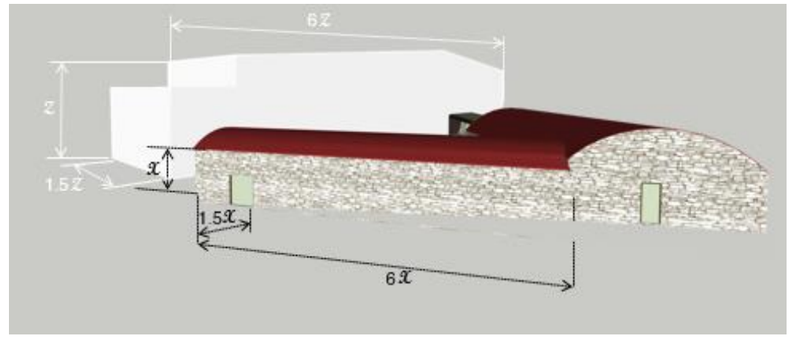


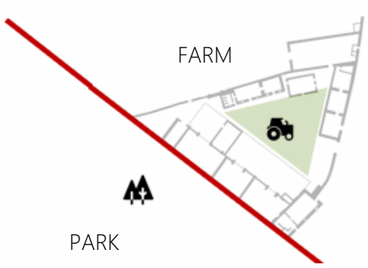
THE FARM – PHASE 2

AREA B1 – THE FARM

The Farm area occupies the part of the former farm complex of buildings to Bessborough House . It is in close proximity to the NIAH listed farm buildings to the south . A conservation assessment of the buildings on site identified a number buildings to be retained but critically the geometry and boundary nature of the site with the park to the West would need to be maintained. In consultation with Cork City Council Conservation officer the below right strategy was agreed with new buildings forming this edge to the park (building D). Expressions of the architecture of the building are linear and long in nature to reflect the proportional and unique character of the retained structures on site . Materiality is also derived from the retained farm buildings with feature corrugated metal used extensively. The area is opened up to re establish open connections to the East with access provided to the park area and building C beyond.

This site is proposed to have 140 residential units in total combined with Building C in the park with a creche and supporting facilities.





AREA B2 – THE PARK

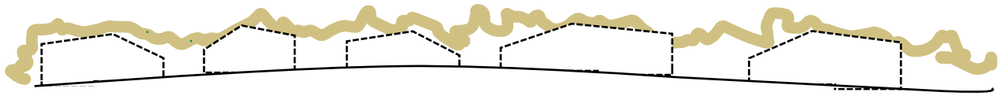
The Park area to the north of Bessborough House while originally intended to be an open demesne setting was extensively planted in the 1980s dramatically changing the landscape intent. Still remaining though dissolved is an axial route from the house to the farm. The proposed new development takes this route as a primary generator and forms a boundary to the now treed open space to the north and west . Development is low scale at 3 storeys and addresses the rear former walled garden area with an modest mansard roof expression. Both buildings C and D offer significant supervision to the new public park to their west .

THE NORTH FIELDS – PHASE 3

AREA C – THE NORTH FIELDS

The North Fields area is currently in rolling meadow with a mature trees stands to the west boundary. Development here is designed to be low scale (equal to or below tree height) and form an edge to an open space landscape off the main avenue per original historical intent. The architectural expression is organic in plan form, elevation and site arrangement to play on the original tree line boundary. Servicing is to the rear offering the buildings face directly to the parkland to their east. This parkland along with the bishops walk to the rear are to be made publicly accessible. An indicative location for the National Memorial and Record Centre is offered midway off the avenue. This location offers a unique opportunity to create a new community in a parkland setting.

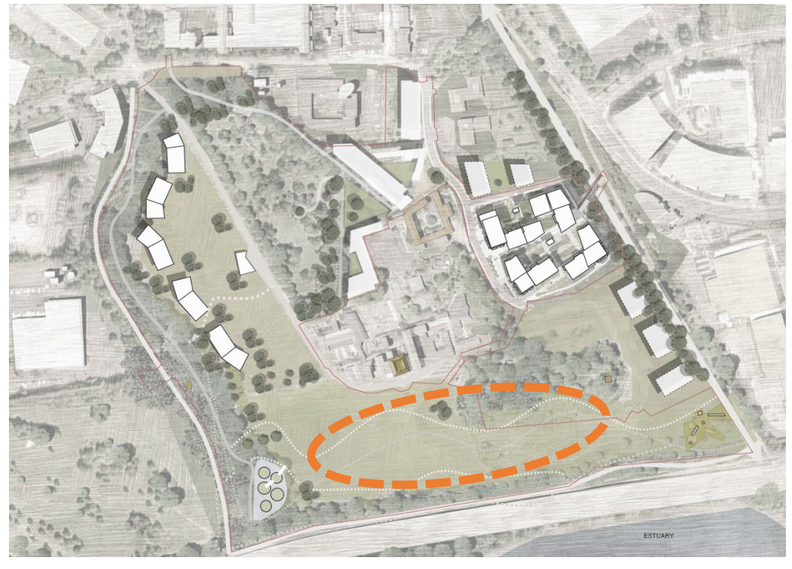
Area D is preliminary in nature and is designed to accommodate a maximum of 200 residential units and services . It is subject to future detailed engagement with Cork City Council on design proposals .



REMEMBRANCE PARK – PHASE 3

AREA D – THE REMEMBRANCE PARK (NEIGHBOURHOOD PARK)

The Remembrance Park incorporates the southern prospect of Bessborugh House which forms its centre piece . It is intended to be a wide expansive green open space for public use. Given the size at 13.6 acres it has the possibility to be laid out with a number of amenity areas with in to address remembrance of all stakeholders of the Bessborough Mother and Baby home legacy. Certain historical aspects of landscape and route restoration are envisaged as part of this areas overall masterplan. Opportunities exist for circulation routes to setup to take in key features of this area with the potential of destination play area to the east while the calmer more reflective space at the historic pond area to the south west. The park links the eastern greenway and the western green way and combined with a highly permeable masterplan, circular amenity routes are made available to the public. It is intended at phase 3 stage to cede this land to the city or relevant stakeholders for full implementation to their needs .



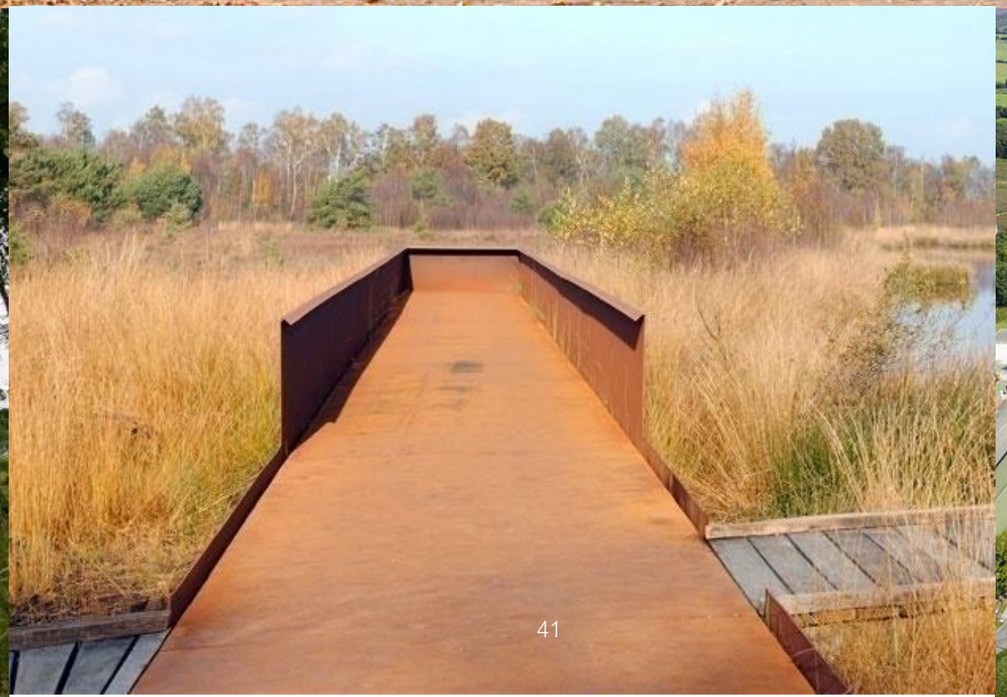
A Parkland to Remember – What a Remembrance Park can look like

A Memorial space – How other Cities approach Memorials - International Best Practice.

A recognised best practice approach on memorials is to put the key memorial stakeholders at the centre of procurement process. Workshops with interest groups, public consultations and a democratic approach yields the optimum outcome for all. All key players need to come together and work to facilitate the goal of the remembrance at hand. Key elements such as design can play a significant role in delivering a shared vision of international quality. We present some other successful Memorial interventions that represent best practice in creating powerful Memorials to tragic pasts internationally.

WES Landscape Architecture: On the site of the concentration camp Esterwegen, built in 1933, a memorial was set up in memory of all fifteen camps in the Ems region and their victims. None of the above-ground construction elements were still standing. For this reason, "tree parcels", with the dimensions of the former barracks were cut out of the red oaks planted in the fifties. A contrast to this almost park-like scenario is formed by the gravel covering of the entire area that once housed the prisoners, the bulky silhouettes like paper cuttings, high walls made of Corten steel, an interpretation of the watchtowers, the course of the wall and the gates. A place for "active" recollection has developed, which encourages the visitors to allow the history and the topography of violence, threat and destruction to evolve in their imagination, while also relating this to the present.

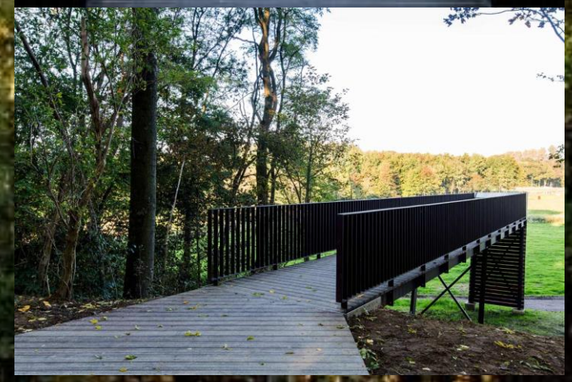
Esterwegen Memorial Site
Esterwegen Germany

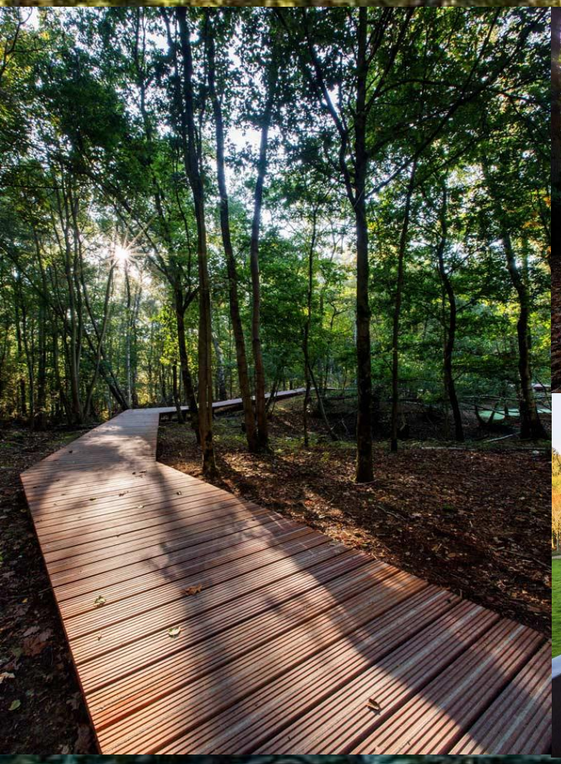


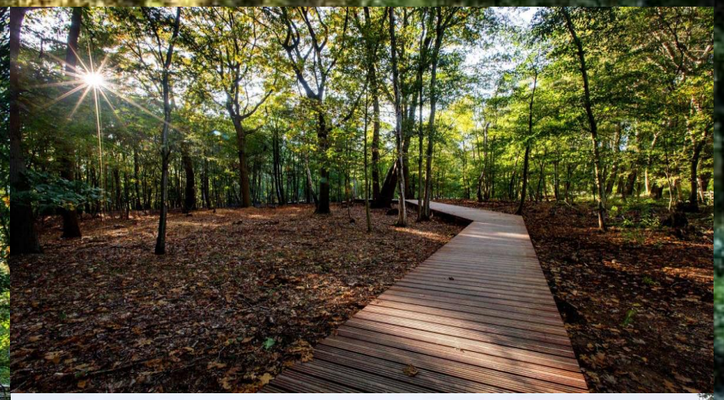
By Gaeta Springall Architects:

The site is in Chapultepec, the most important park of Mexico City. This part of the forest belongs to the Federal Government and was under the custody of the Secretariat of National Défense for many decades, so, first of all, the memorial project means the recuperation of 15,000 square meters of public space. In this project, we give material form to one of the most important issues of contemporary Mexican society: violence. In response to this, we propose an open project, open to the city and open to appropriation by its citizens: a space that exists in a state of complete openness to the city and the people

Memorial to Victims of Violence – Mexico City







By OMGEVING Architects :

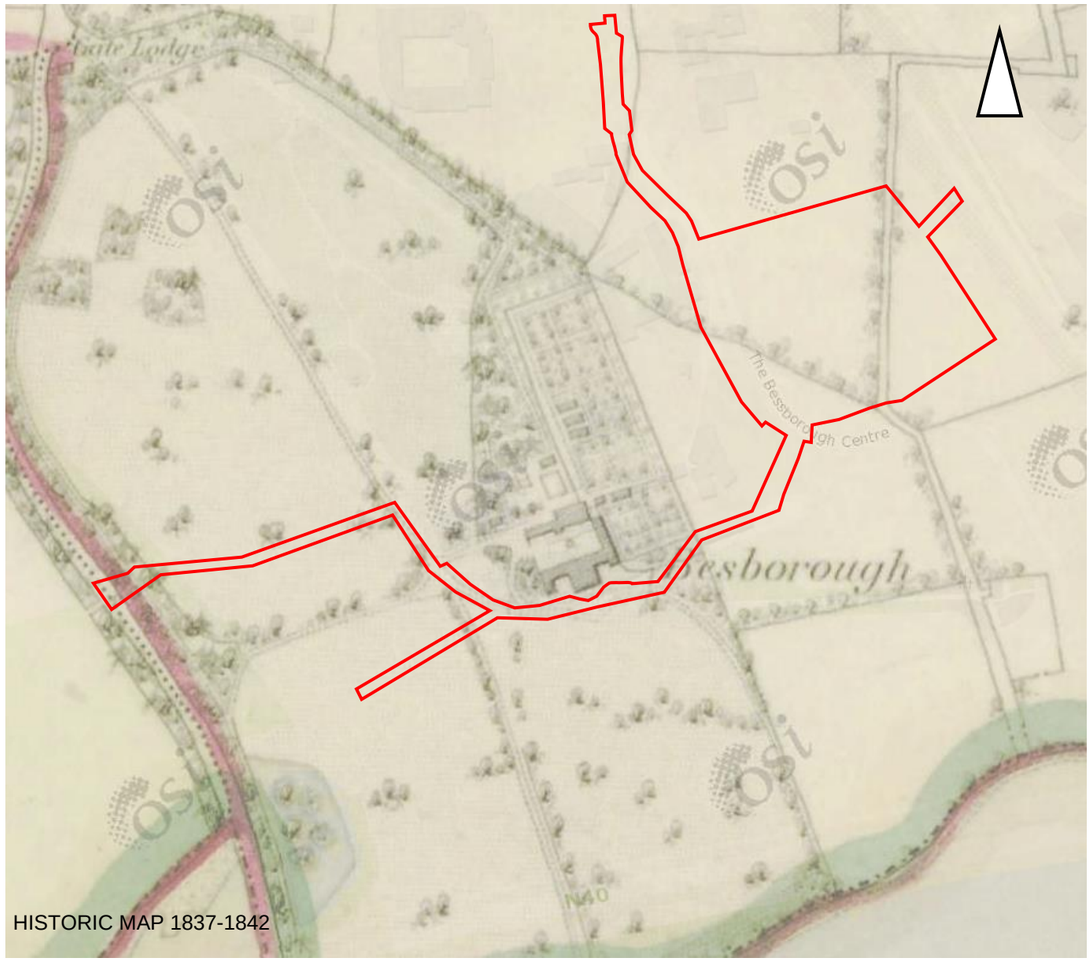
The Bluff in the notorious 'Ypres Salient' is a unique wartime landscape that survives from the First World War. The site was the scene of widespread feverish digging of underground passages and shafts, mine explosions, sabotage and attempts at eavesdropping. In the context of the cultural tourism project, 'Remembrance Park 14-18', subtle measures in and around the site have been taken to improve access for visitors and so that visitors can see what the unique landscape framework in which the fighting took place looked like.

The Bluff Memorial -Ypres Belgium

Play - A New Generation – destination play area

Bessborough presents a unique opportunity to have a new space for children, for children to be the focus in a new and positive way – a new generation while acknowledging the past. The remembrance park has the potential to create innovative & child centred spaces of play and exploration. Already on site is an award winning Creche facility ushering in a new generation of child focused care. We feel new play areas with children's voices in laughter and play in this place would hold deep resonance coupled with the remembrance theme at its core. A Highly accessible location off the main eastern Greenway is located to the south east of the remembrance park

Application site analysis



HISTORIC MAP 1837-1842

The above map shows the original pike family home and estate stretching to over 200 acres. The map captures the main home structure with later additions of stables farm and the folly to arrive later (see Historical listings).

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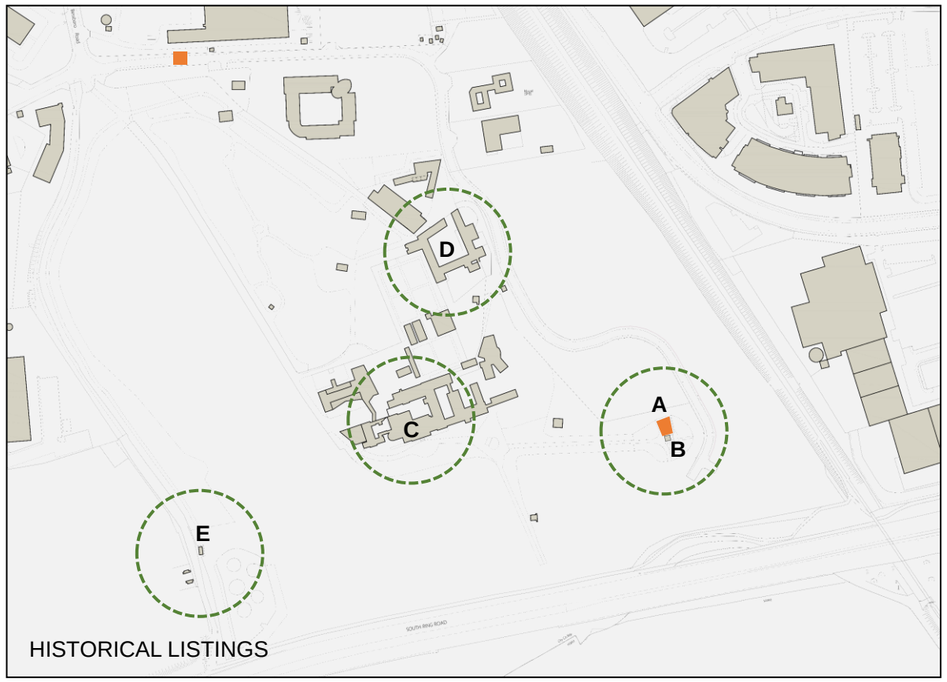


HISTORICAL LISTINGS

A Cemetery

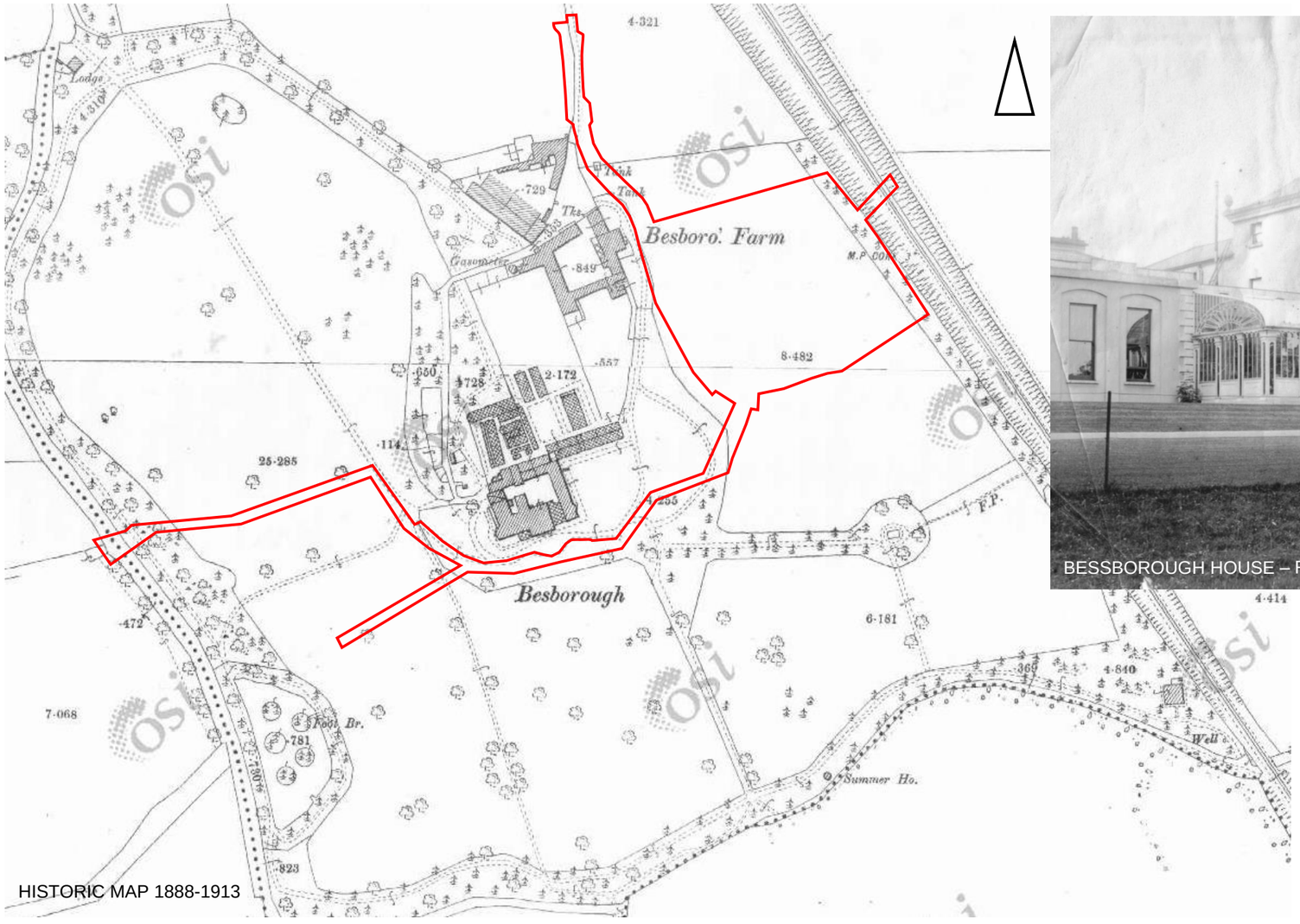
B Folly (NIAH 20872007)

C Bessborough House (PS 490)

D Farmyard & Stables NIAH (Reg. no. 20872006)

E Ice House (RMP no. CO074-051)

HISTORICAL



HISTORIC MAP 1888-1913

BESSBOROUGH HOUSE – PIKE FAMILY HOME c. 1880's

The above map shows the development of the site from the late 19th century. The Pike Family home is extended to the north and east. The site traditionally appears to have extended northwards with the high value southern prospect remaining open throughout the development sequence . The Folly to the east is also added at this point .The rail line to City-Passage West appears (currently as greenway) at this point with the private Pike family train stop in the south eastern most corner .

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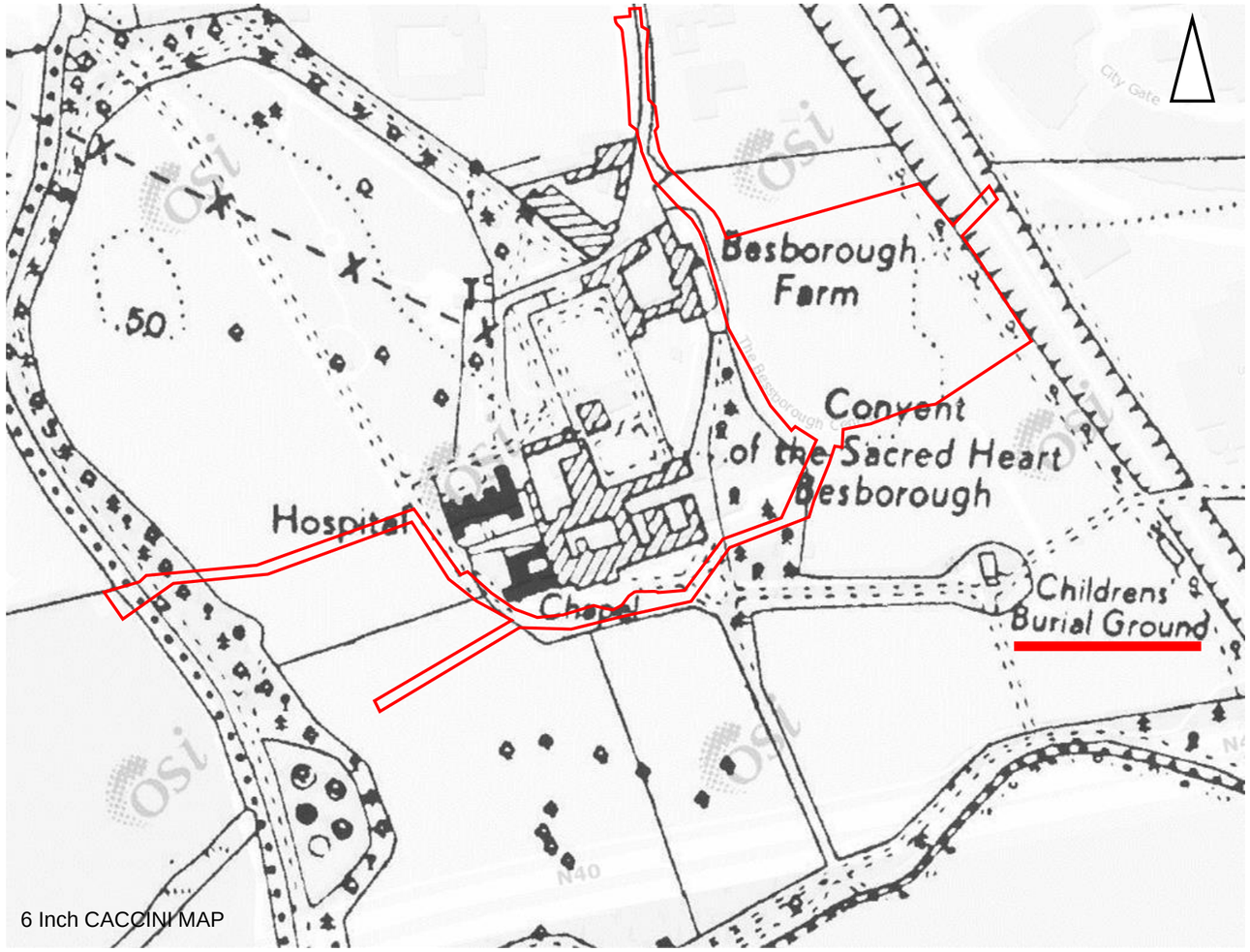
HISTORICAL



6 Inch CACCINI MAP

The above Cassini map shows further modification to the north and west of the family home (black). The map clearly identifies the extent of open space, pathways and boundaries associated with the application site.

At this point the map identifies the 'Convent of the Sacred Heart' as the order takes over the estate with a hospital element to the west. Of note is the text saying 'Children's Burial Ground' to the south east of the Folly (red).

HISTORICAL

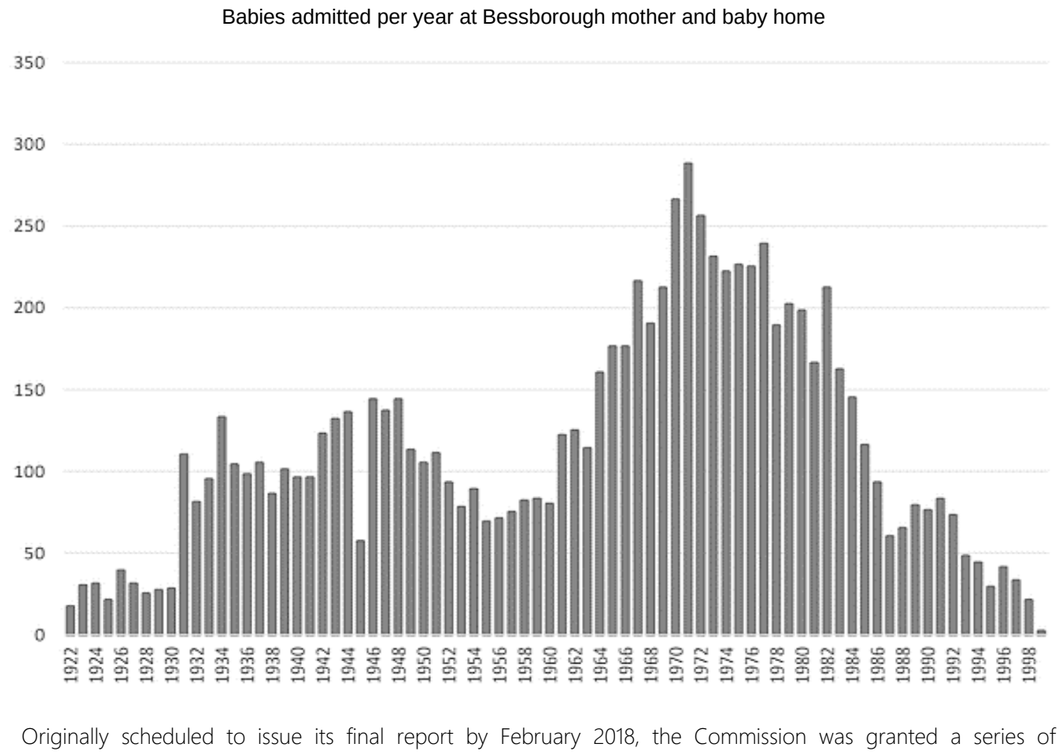
BESSBOROUGH MOTHER AND BABY HOME 1922- 1999

Bessborough Mother and Baby Home on Bessborough Rd, Blackrock, was opened in 1922 and operated until 1999. During those 77 years, 9,768 mothers entered the home and 8,938 children were born or reared there. Of these children, 923 died. The burial place of a large number of babies who died at the home remains unaccounted for and a source of huge concern and pain for survivors and their families.

Bessborough was owned and run by the congregation of the Sacred Hearts of Jesus and Mary and was regarded as one of the first 'special' institutions for unmarried mothers and their children.

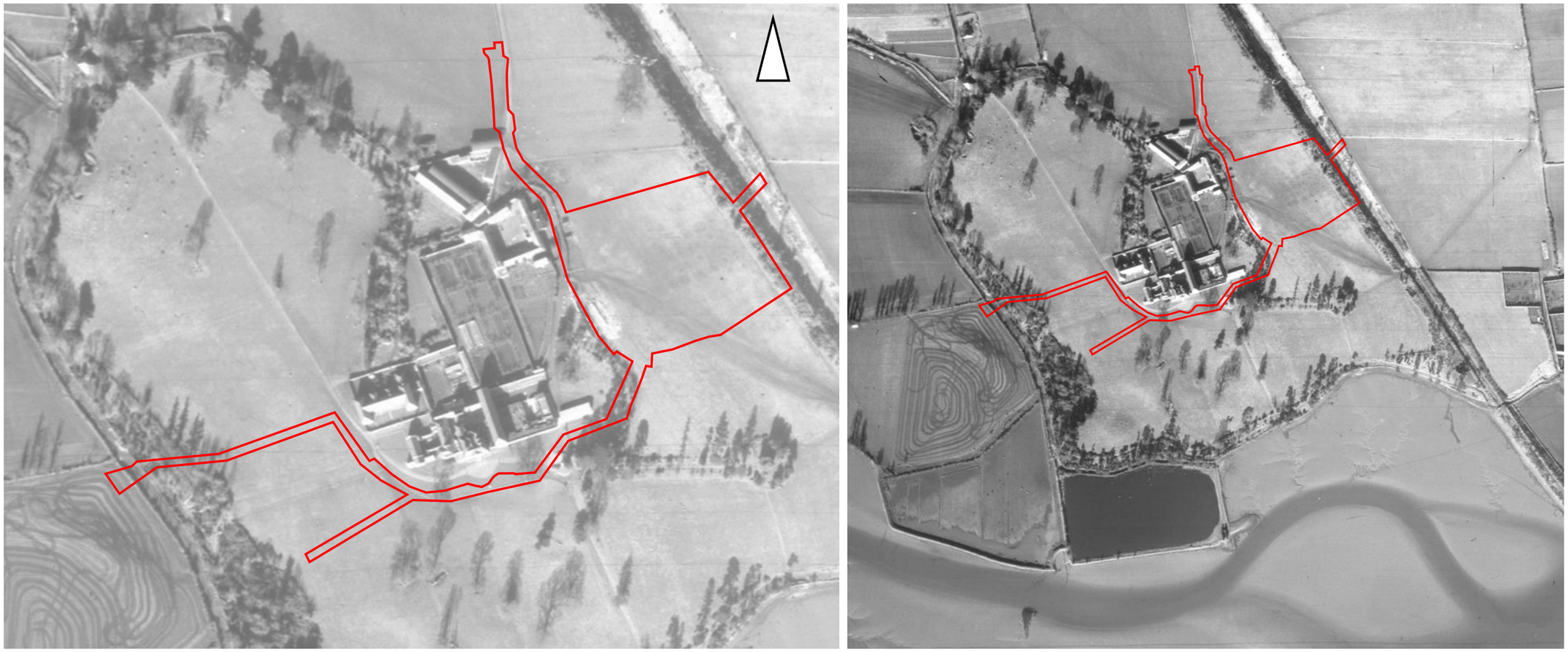
The Mother and Baby Homes Commission of Investigation (officially the Commission of Investigation into Mother and Baby Homes and certain related matters) was a judicial commission of investigation, established in 2015 by the Government to investigate mother and baby homes.

The Mother and Baby Homes Commission of Investigation submitted its final report to the Minister for Children, Equality, Disability, Integration and Youth on 30 October 2020. The report was published on 12 January 2021.



Originally scheduled to issue its final report by February 2018, the Commission was granted a series of extensions. In January 2021, the final report detailed that approximately 9,000 children, one in seven of those born in the 18 institutions covered by the Commission's terms of reference, had died in them between 1922 and 1998, double the rate of infant mortality in the general population. The final report was published on 12 January. On 13 January 2021, Taoiseach Micheál Martin made a formal apology to survivors on behalf of the state. The Commission was subsequently dissolved on 28 February 2021. Today the location of the burials remains unidentified and a source of huge pain and concern for Survivor groups and their families .

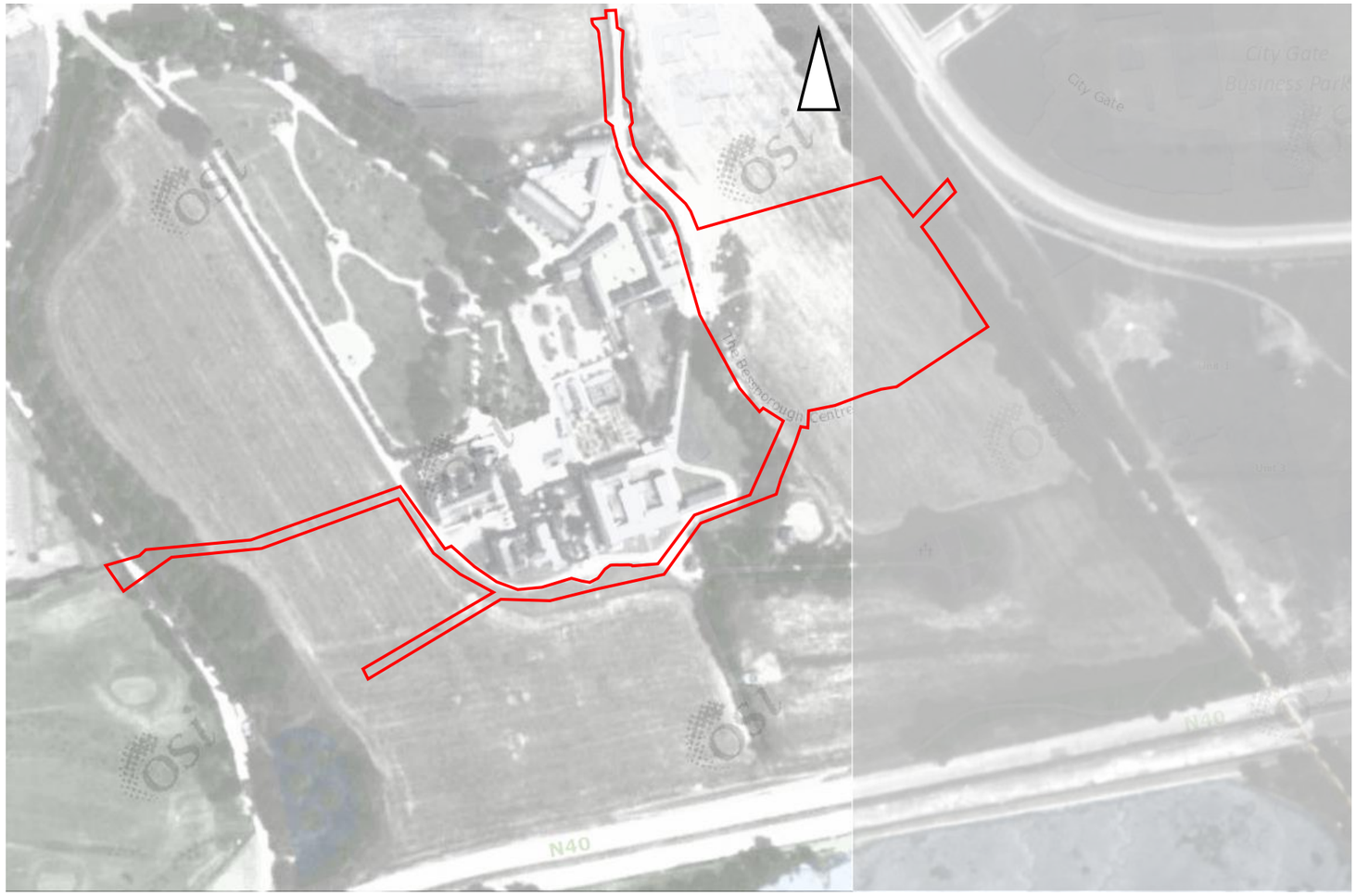
HISTORICAL



HISTORIC ARIEL PHOTGRAPH 1956

The above Aerial photograph shows the lands with key elements still intact with meadows to the north , east and west

HISTORICAL



HISTORIC ARIEL PHOTOGRAPH 1995

The above Aerial photograph shows the extent and impact of the landscape interventions c.1980.s .to the north of Bessborough House with a redesign of the area to the east of the avenue. The remaining wider site remains largely rural and undeveloped. Significantly the Main N40 roadway to the south now severs a portion of the prospect lands .

HISTORICAL

HISTORIC ARIEL PHOTGRAPH c.1995

The above aerial photograph shows the extent the wider site went through a significant development phase of commercial building. Within the site the creche to the east of Bessborough House is completed. Development of the HSE Buildings to north of the application site is evidenced.

HISTORICAL

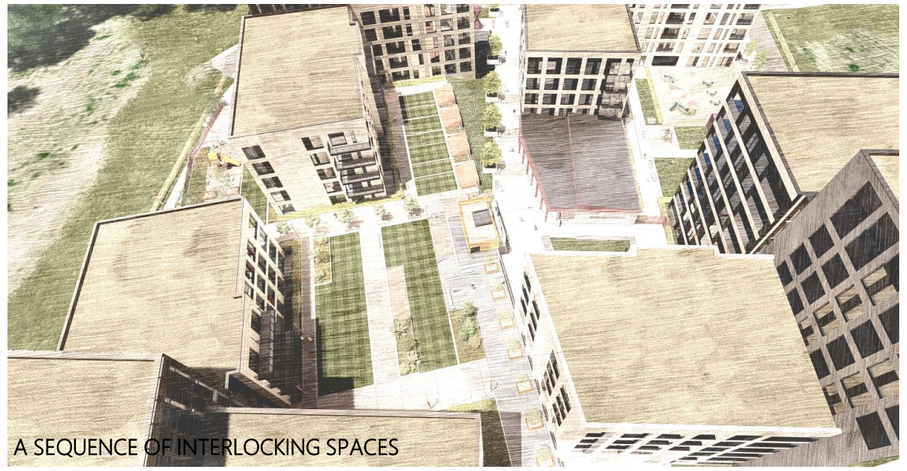
ARIEL PHOTGRAPH c.2018

The above aerial photograph shows the extent of extensive development the wider site continued to go through which include further commercial buildings, retail and residential areas beyond the site. The new convent is now built to the north of the application boundary and more recently the main Bessborough centre is taken over by the HSE. Many of the farm buildings fall into dereliction. The application site remains in meadow with a new roadway to the west and south surrounding the folly area .

HISTORICAL

MASTERPLAN DIAGRAM

NEW BRIDGE TO GREEN WAY



A SEQUENCE OF INTERLOCKING SPACES

MASTERPLAN RESPONSE

The masterplan responds to the location and its historic heritage being informed from geometry's, special & building arrangements from its nearby context. These are expanded on and analysed in more detail later in the document.. The proposal looks to the future by providing greenway linkages to serve the wider site and offer the location as a highly sustainable location for new communities to emerge.

NEW STREET FRONTAGE

HISTORICAL

+ 12 METERS

+6 METERS

+- 0 DATUM

CONTOURS

The topography on the site is significant to the interpretation of the masterplan, with Bessborough House occupying an elevated prominent location central to the site. The lands to the south and west have significant level change offering and opportunity for any interventions to be respectful in prominence while still achieving a sustainable community population with in the site. Lands to the east and south while more elevated benefit from mature tree stand locations to minimise any visual impacts on the existing built heritage with high canopy cover.

PHYSICAL

MATURE SPECIMENS BROAD LEAF & MIX

BROAD LEAF MIX LATER AVENUE PLANTING

RECENT (c.2000) MIX, SAPLING, BRAODLEAF & HEDGEROW LATER PLANTING

ARBORICULTURE

A preliminary assessment of the arboricultural value to the specimen variety across the site has been conducted and is referenced in the Historic by Arbo Care as part of the submission. Large tree stands form significant features across the wider landscape and provided for a high quality environment. The masterplan acknowledges this high quality asset to this location and responds with a scale and arrangement sympathetic to nearby arboricultural constraints.

PHYSICAL

ARBORICULTURE

A full tree survey was undertaken by ArborCare in October 2020 and again in 2021 to survey trees in areas impacted by underground services.

The lands at Bessborough contain a wide variety of indigenous and non native trees which are concentrated around the perimeter of the demesne and in the park north of Bessborough House.

The subject site is a greenfield site with a manmade/ modified landscape of unmanaged rough grass, brambles and scrub. The only landscape feature of value is the dense tree line along the eastern boundary which extends along the Old Railway Line Greenway.

The proposed development of Phase 1, The Meadows has very limited impact on existing trees as the proposed buildings are set back from the dripline of trees on the eastern boundary.

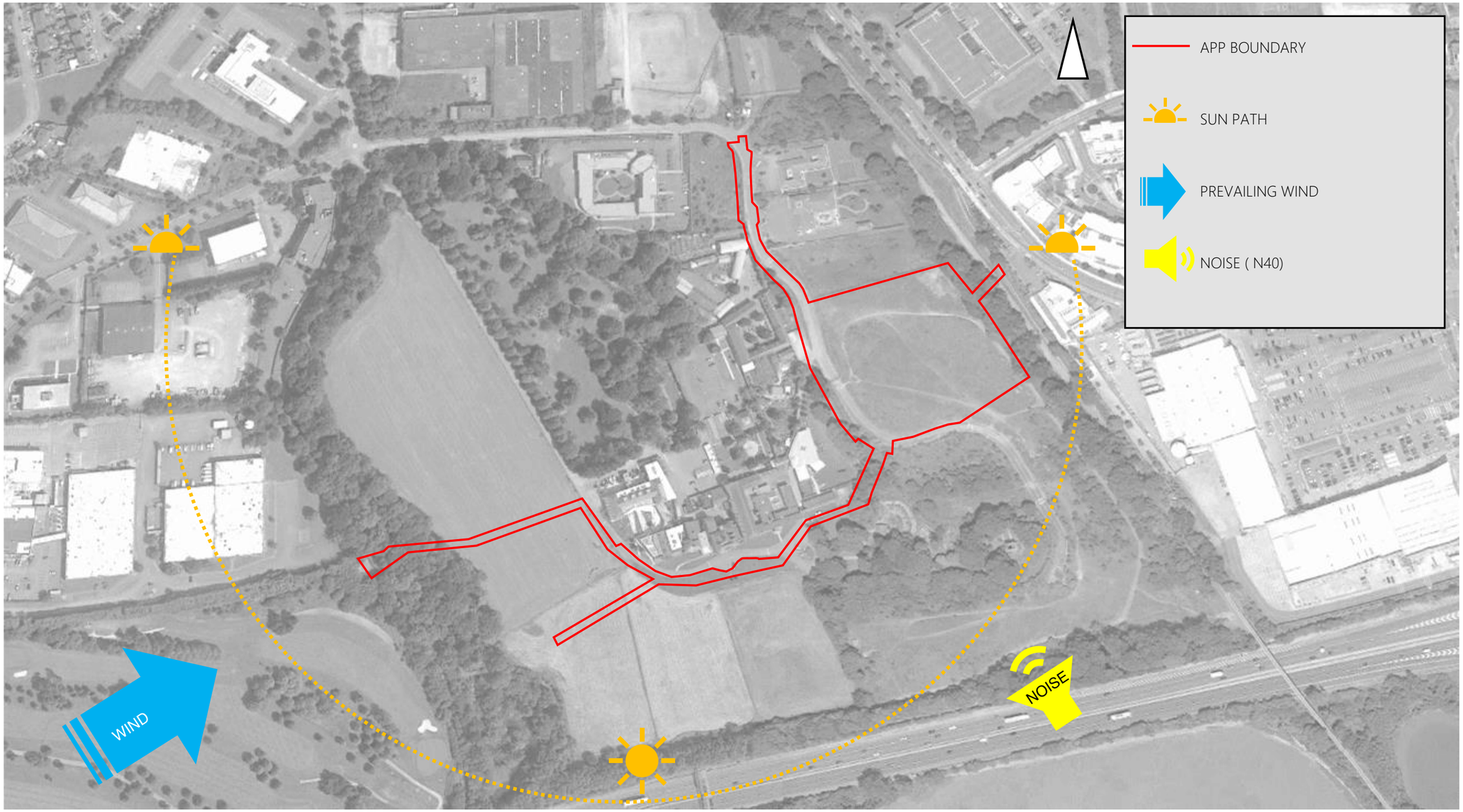
The proposed bridge over the Greenway, does however, require the removal of 3 No. native trees and the underground services in the wayleave south of Bessborough House will require the removal of 10 No. trees (9 of which are native trees.) Care will be taken in the erection of the proposed pedestrian bridge to minimise the impact on the Category A and B trees in the vicinity of the bridge.

The lower boughs of an Oak (tag #4639) will have to be carefully removed in order to facilitate the bridge. New tree planting includes a high percentage of non native trees as many of the trees will be grown at podium level or along the street where the selection of native trees may not be suitable due to growing conditions or specific location. Native Yew and Hawthorn hedges are proposed on boundaries to promote a more ecologically biodiverse landscape.

TREE LOSS
13 No. Trees incl. 1 non-native trees and 12 native trees

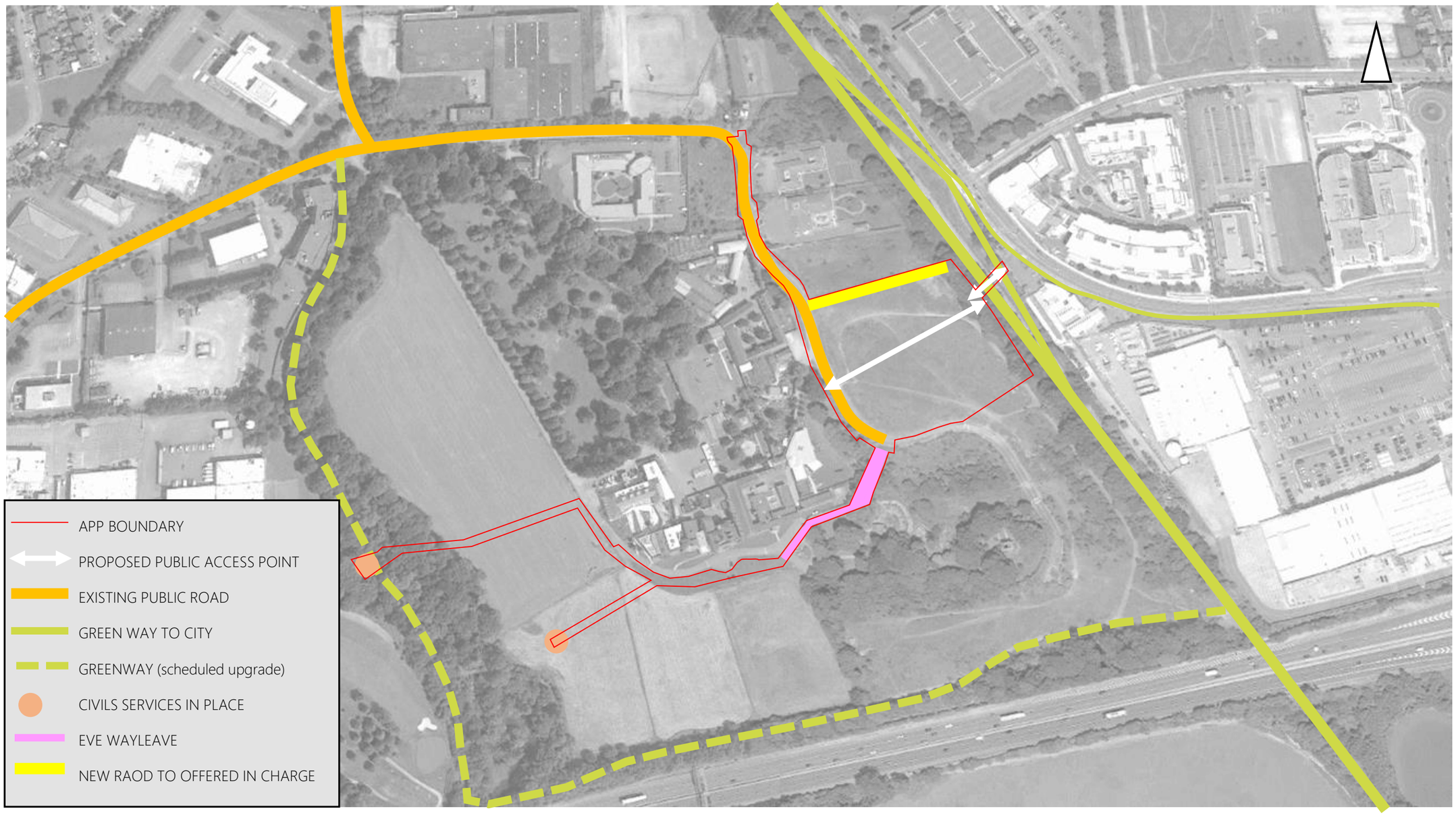
PROPOSED NEW TREES
108 No. Trees comprising 63 non-native trees and 45 native trees

PHYSICAL



ENVIRONMENTAL CONDITIONS

ENVIRONMENTAL

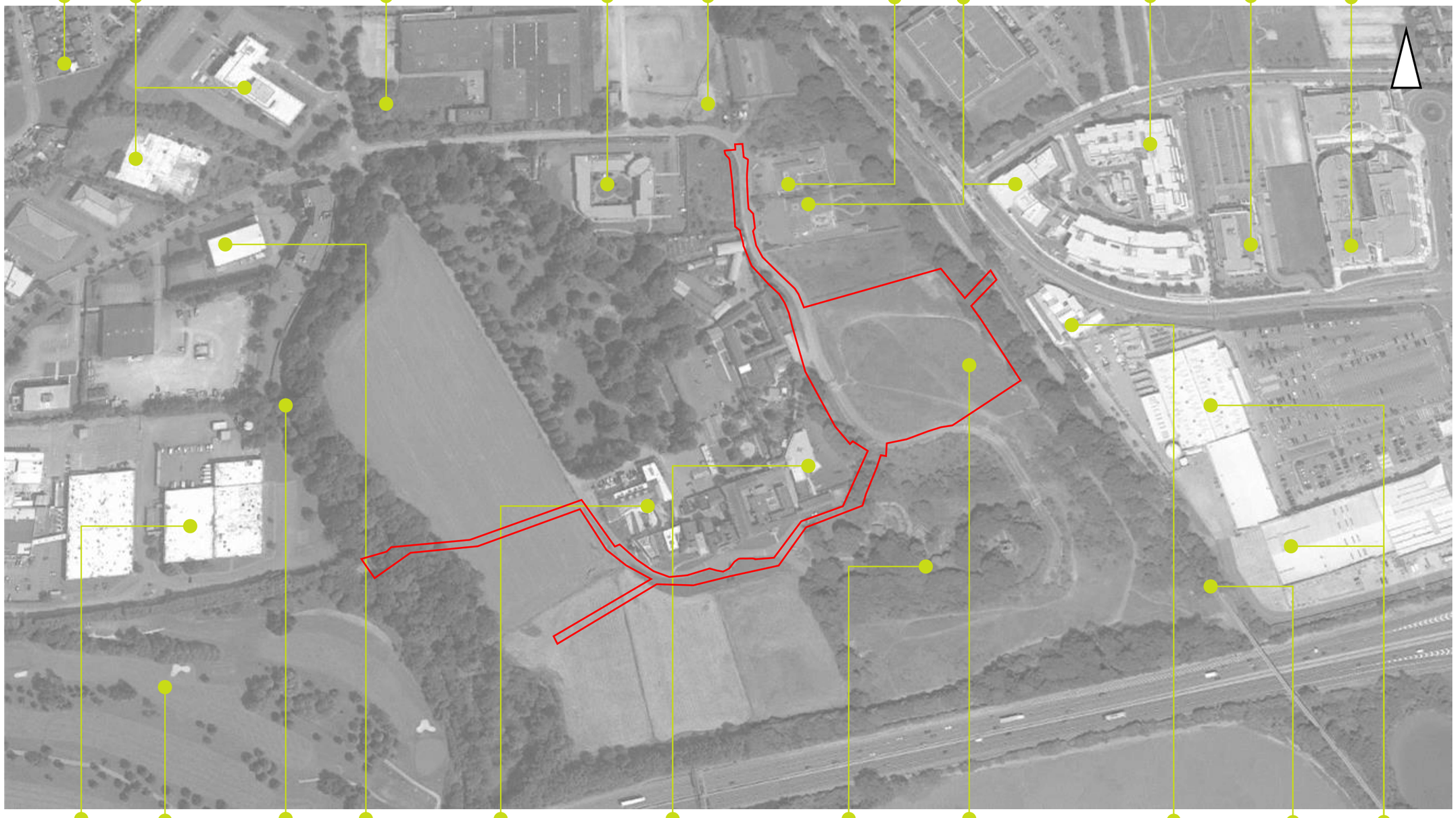


AVAILABLE INFRASTRUCTURE

The site is served from the East and North by public roadways of adequate standard for the proposal as outline in traffic reports. Greenway connectivity is provided to the east of the site to the main city greenway. The site is fully serviced to the south for foul and storm systems.

INFRASTRUCTURE

Residential | Office | New Housing Site Under Construction | Sacred Heart Convent | New Housing Complete | HSE | Medical | Office Use | Office & Retail



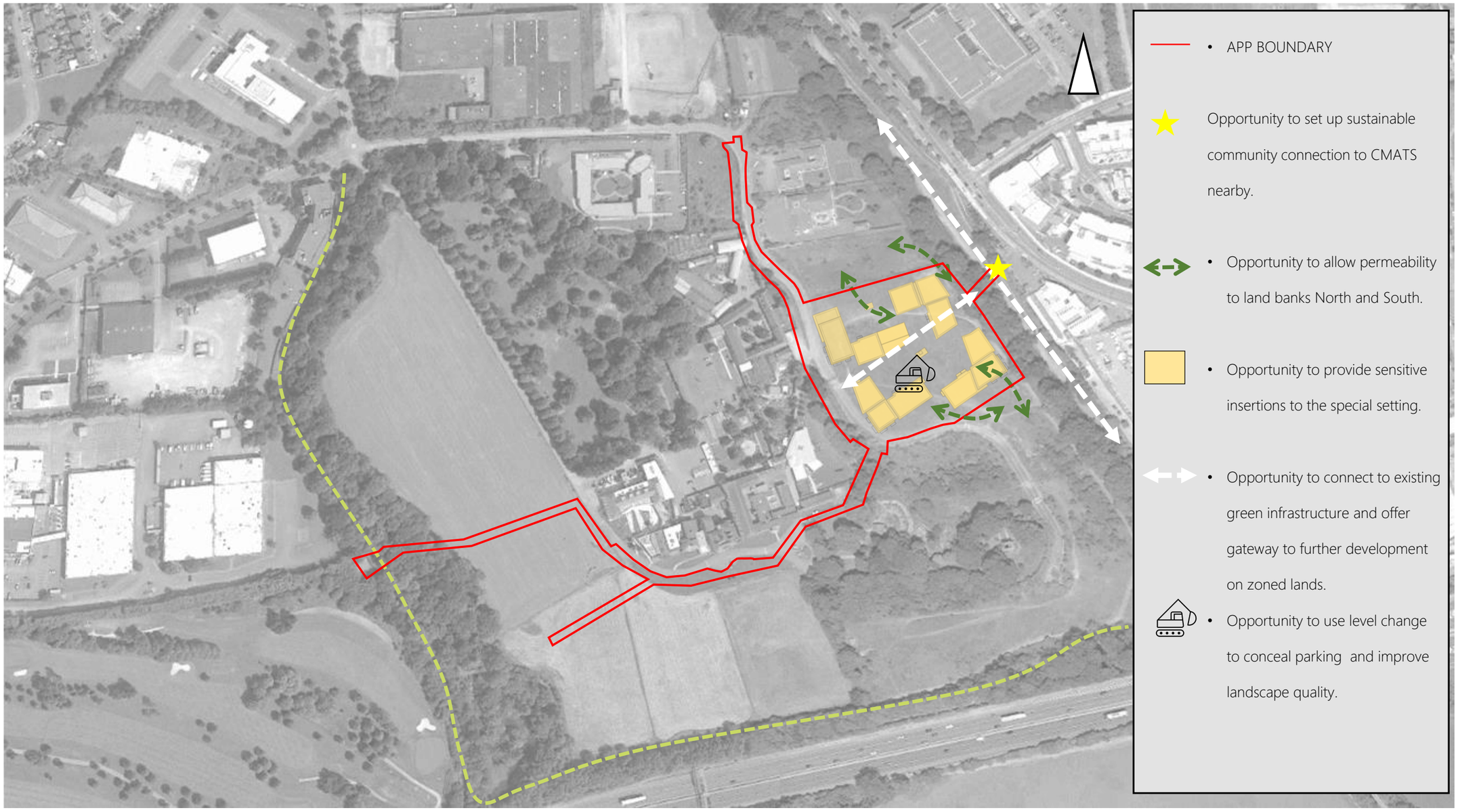
Warehousing | Golf Course | Greenway | Office Use | Bessborough Centre HSE | Creche | CSSA Concern Area | ' The Meadows Site ' Phase 1 | Dogs Home | Greenway | Retail |

LAND USE

CONSTRAINTS

Surveyed tree stands exist to the east of the site. Strong historic boundary alignments of the railway line to the eastern boundary need to be respected and enhanced in proposals. With regard to built heritage of the site, a careful audit of the importance of the setting and important built forms need assessing and valuing before master planning. Scale needs considering carefully given nearby heritage structures.

CONSTRAINTS & OPPORTUNITIES



OPPERTUNITIES

Key opportunities allow for the connection of the site to existing greenway infrastructure for use by future residents . The wider site can be made more porous and permeable to facilitate active spaces while respecting established boundaries built and landscaped. The site also has a valuable built heritage which can be used to generate and inform the design response

CONSTRAINTS & OPPORTUNITIES

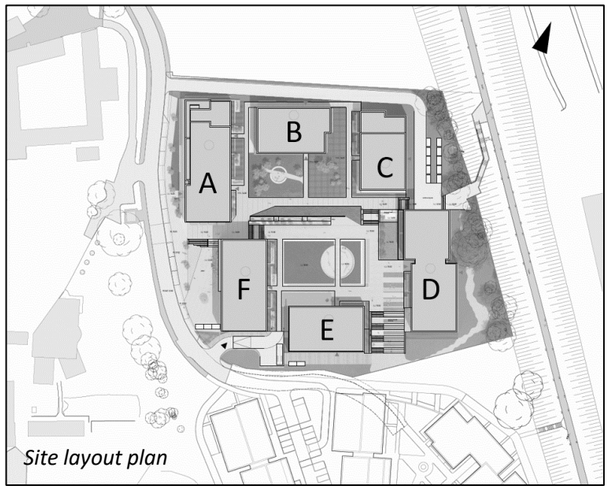
Site Plan Response

DESIGN DEVELOPMENT – EARLY OPTIONS CONSIDERED

SECTION 247

This preliminary scheme was presented to Cork City Council at initial Section 247 (13.05.2021). The scheme is set out orthogonally to the main Bessborough House (same geometry) to create a large internal central amenity space ***(Fig 3.5.1.A.4)*** surrounded by 6 apartment blocks. Heights ranged 5 – 9 storeys over the blocks with Building A @ 6 storey, Building B @ 6 Storey, Building C @ 8 Storey, Building D @9 Storey, Building E @ 5 Storey and Building F @ 8 Storeys. A split-level podium was proposed with parking contained below buildings D, E & F 's amenity space. This split level offered definition to a lateral desire line through the scheme from East to West connecting the Bessborough Road to the West with the Greenway to the east via stepped access. A northern boundary access road is provided for service and was to be offered in charge for orderly development of the residentially zoned site to the north. Buildings architectural expression was to be a simple ordered brick mono form expression to offer contrast to the large landscape central areas. Building D was stepped in plan to reduce its mass from Eastern vistas. A large public plaza was intended for with front of Building F with active communal uses presenting to the square. A 25 child creche was located at ground floor of Building A, with a drop-off set down on the western road. Basement / under croft parking access was to southwest corner of the site. A full photomontage pack was presented at the meeting to assess visual impacts in detail.

Key Data of Alternative A	
Total site area (red line)	15,428 sqm (1.542 hA)
Development area	15,428 sqm (1.542 hA)
Residential density	294 units total - 190/hA
Height range	5-9 storey
Housing mix	34% 1 bed ,60% 2 bed, 6% 3bed
Public open space	17% @ 2625sqm
Resident Amenity space	3696 sqm (1896 sqm min required)
Other uses	25 Child Creche
Carparking spaces	35.4% - 104 spaces
Access to development	From Bessborough Road to West and steps to East (Greenway)
Tree removals	3
Trees replanted	25+ interior landscaping



Site layout plan


preliminary model

At the S.247 meeting City Council raised significant issues around the masterplanning of the design. Principally what was viewed as inadequate placemaking, resident's amenity separation, building heights with concerns of the orientation of the buildings in relation to the Greenway to the East required the design team to re-assess certain approaches to allay the City's concerns.

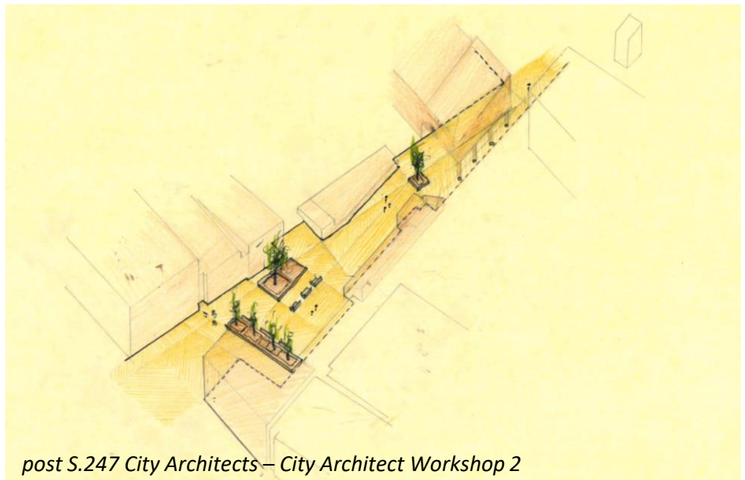
It was at this stage, agreed with the City, that the design team would engage with the City Architect to flesh out the more macro masterplanning issues and building assembly approach ahead of further submission.


Eastern approach from greenway

DESIGN DEVELOPMENT – CITY ARCHITECT WORKSHOPS

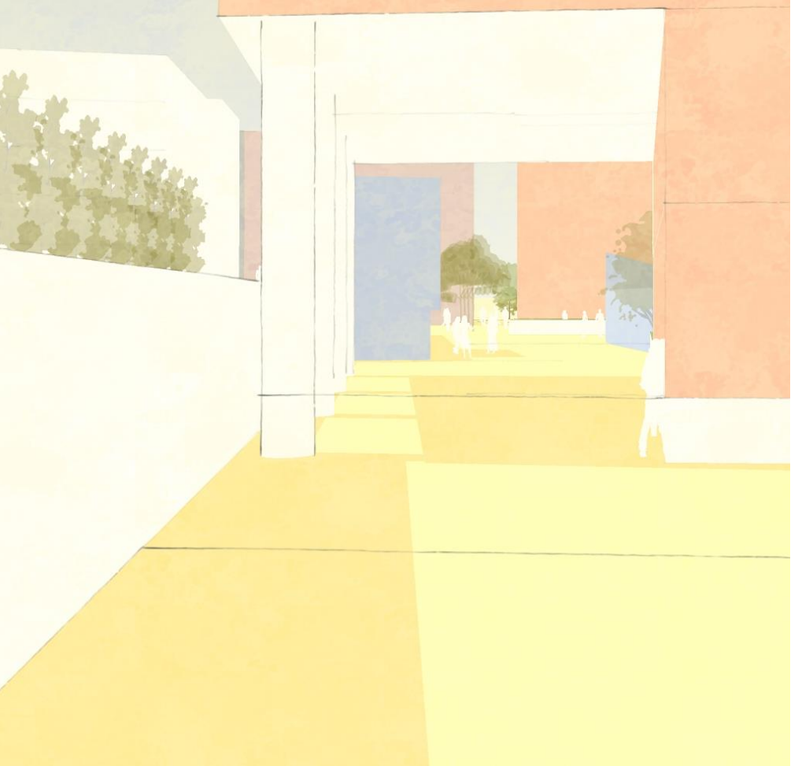
An intensive sequence of workshop meetings was held with the City Architect where a range of approaches were discussed at macro master planning level. A proposal was put forward at the second workshop which re-arranged the geometry of now 4 L-shape blocks which would incorporate a number of environmental generators (the Historic House and the Former Rail line) to inform a unique plan formation of interest and would respond more sensitively to its setting. A much larger scale urban gesture of a new East West streetscape was proposed with active communal use frontages along with more articulation of the plan form and heights . At this point an agreement in principle to this approach as being a better solution to issues raised with opportunities for more place making being present in the configuration.

post S.247 City Architects – City Architect Workshop 1



post S.247 City Architects – City Architect Workshop 2

Initial design concept post second city architects workshop with then live MWB Two LTD applications to the South. The scheme is generated around a primary public realm piece to connect the wider estate to the greenway. The City Architect was in support of the approach of the design approach with further detailed design refinement pre-tri-part submission.



Cork City Council Tri-Part Report

City Architect, dated 14th October 2021, which states that the proposed development *"consists of 4 No. 'L' shaped apartment blocks centred on a pedestrian route forming courtyards off this route as well as forming an edge to this rectangular site set in parkland. The pedestrian route extends to a bridge over the 'Greenway' to another pedestrian route which joins the 'Greenway'"*.

The report describes the proposed development as follows:

"The baseline height of each 'L shaped' block is 5 to 6 storeys and increased to 8 & 9 storeys on the two eastern 'L Shaped' blocks fronting onto the 'Greenway'. Due to the site topography, carparking is accommodated at basement level, south of the pedestrian route, whereas north of the pedestrian route consists of active 'street uses' – café, work and leisure facilities. The southern courtyard, on the south side of the pedestrian route, is at a higher level of 1.5m above the route.

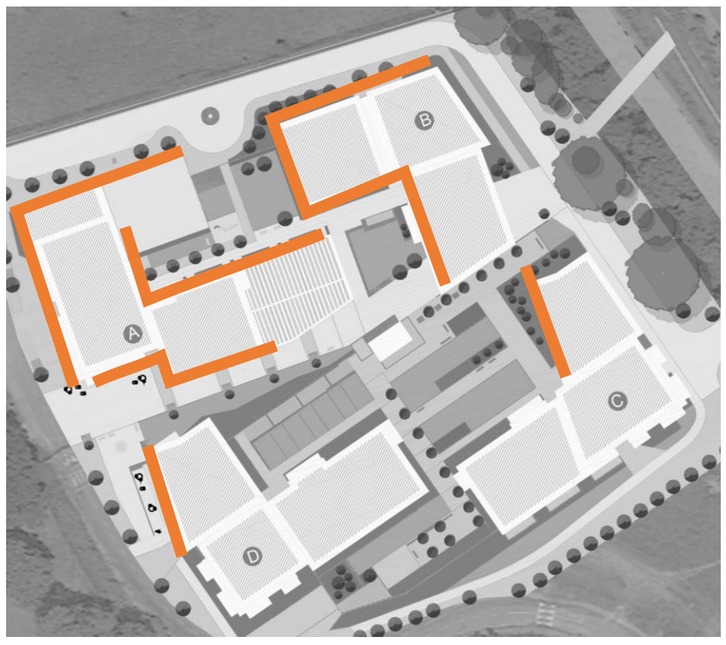
In appraising the proposal the City Architects report states that:

"From an urban design standpoint the four 'L Shaped' apartment blocks create a confined urban edge to a built form in a parkland setting. The pedestrian route assists in linking the 'L Shape' apartment combined with associated courtyards into a cohesive urban form. The devise of pedestrian bridge over the 'Greenway' route provides an image of gateway development to a formal country estate which is appropriate. In this case the use of existing site levels for underground carparking is appropriate.

It further states that *"in architectural terms the form of the 'L Shaped' apartments are well articulated in terms of height concentrating height at a corner location. The massing of the forms are well considered, as well as the solid to void proportions. The window fenestration treatment is very elegant. The use of brick material gives a unity to this scheme and use of various shades provide appropriate interest."*

The City Architects report concludes by stating that *"in summary, this is a well considered scheme and I have no objections"*

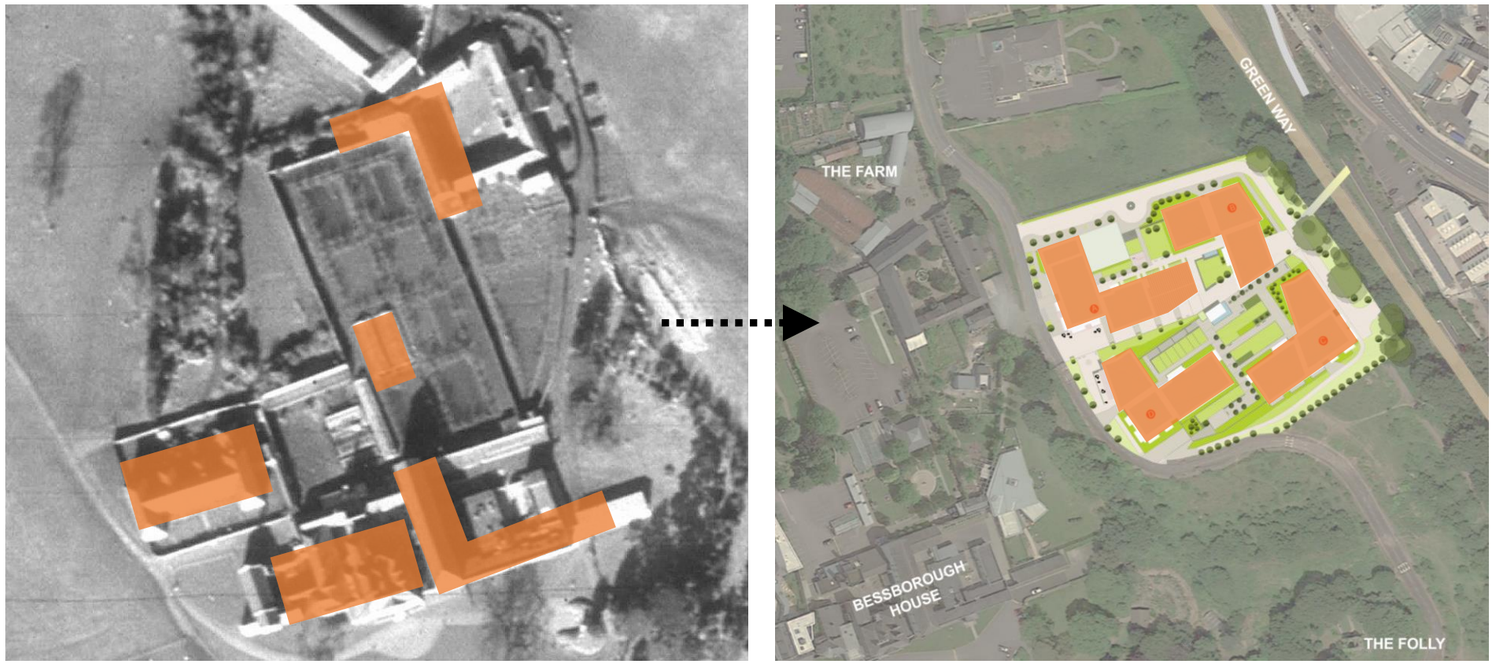

GREEN WAY
THE FARM
BESSBOROUGH HOUSE
THE FOLLY
A
B
C
D



HISTORICAL AXIAL REALTIONSHIP

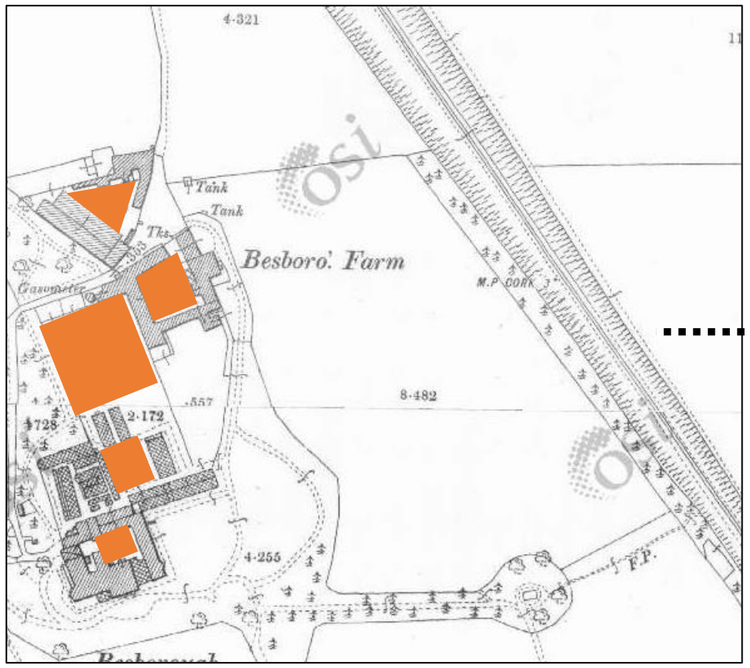
The proposal is informed by the existing geometries on the site of Bessborough House, its build extensions and evolution while also referencing the strong linear geometry of the former rail line to the east. The proposed site layout and individual buildings arrangements gesture towards this geometric discipline to form an interplay of relationships.

MASTERPLAN APPROACH



HISTORICAL CLUSTER

The Bessborough House estate is an assembly of buildings held within a define set of enclosures forming boundaries and defining edges. This approach is applied to the proposal with buildings forming an enclosure and sense of place while also being permeable and legible.



HISTORICAL SPATIAL ARRANGEMENTS

Bessborough House complex still today holds a sequence of spaces, courtyards and enclosures though somewhat dissolved from earlier mapping. The proposal incorporates this approach to create different spatial arrangements and internal enclosures of defined uses and experiences.

MASTERPLAN APPROACH

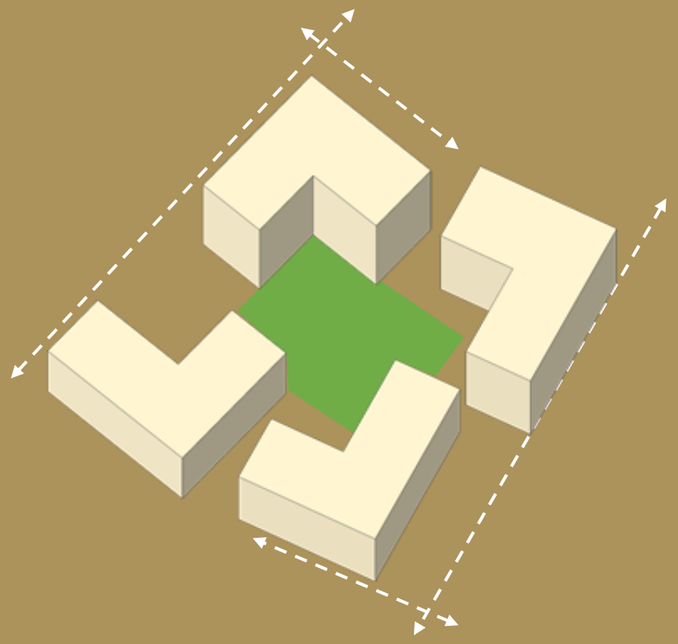
PUBLIC REALM

The proposal creates a high quality new public realm piece laterally across the site for public and residents to access the site and beyond.

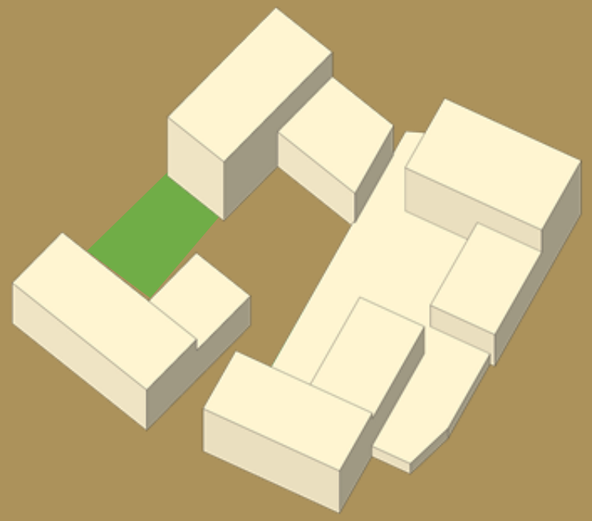
PRIVATE AMENITY

Clear separation between primary amenity spaces and the public areas by a combination of landscape and level interventions.

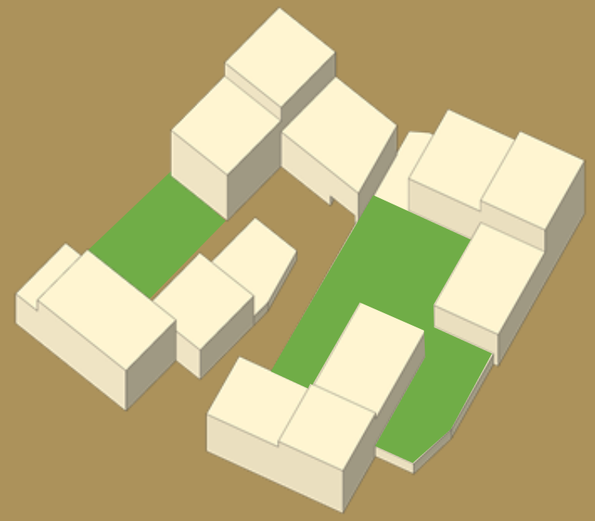
MASTERPLAN APPROACH



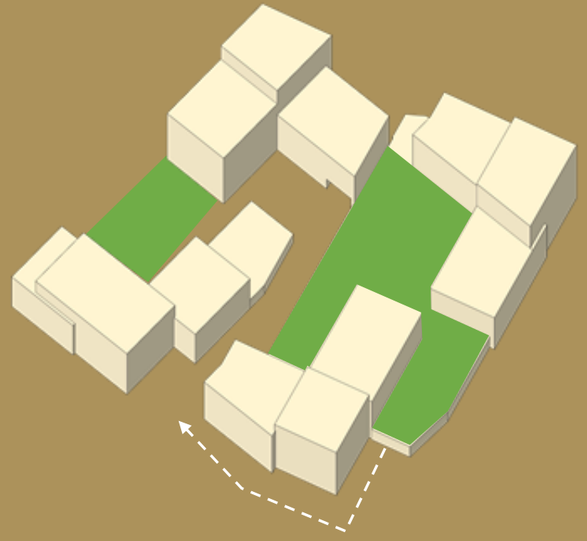
Assembly pf buildings based on historic geometries



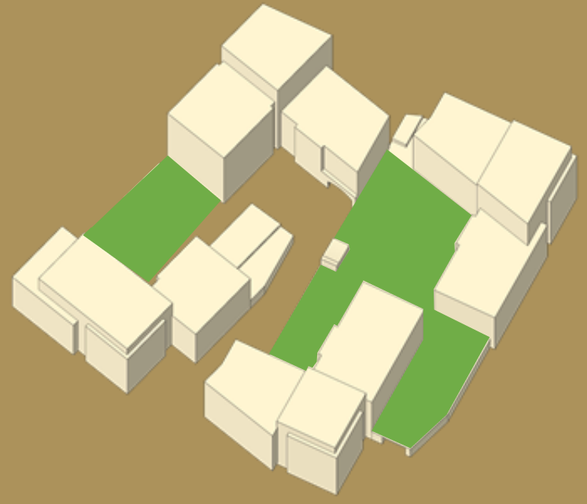
Consideration to amenity segregation and reductions for sunlight to amenity areas



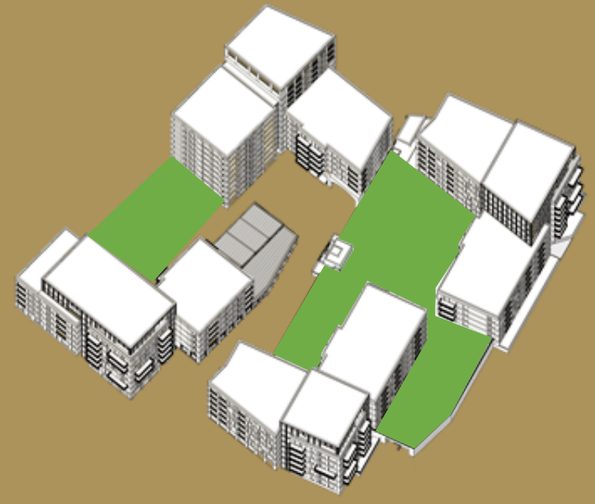
Local scaling at various points around buildings to respond to environs scale



Further refinement to builds geometries to react to relationships

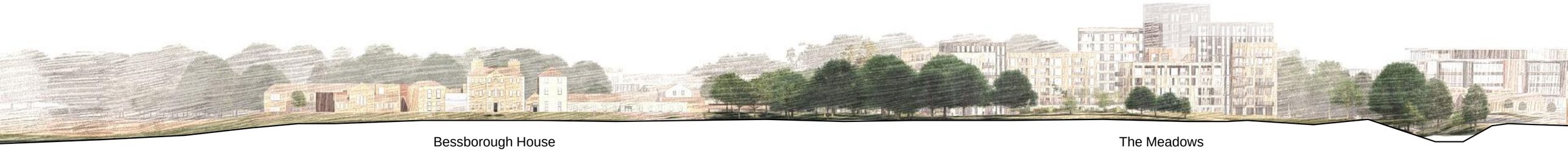


Set backs and further articulation /subdivision added



Detail expression of elemental aesthetic

MASSING APPROACH



CONTEXTUAL ELEVATION TO SOUTH

Consideration has been given to the appropriate scale of the sites buildings given the proximity to Bessborough House and the sensitive views from the domain to the south. Buildings are arranged to have height to the north and east of the proposal to reduce impacts to a minimum.

HEIGHTS AND CONTEXT

POTENTIUAL DEVEOPMENT TO NORTH

CONTEXTUAL ELEVATION TO SOUTH

Access road to be offered for taking in charge with indicative 4 storey development to the north (left)

Approach to the meadows from the north with indicative 4 storey development to the north (left)

To the left is indicative development shown to the North of the site at 4 storeys as it has to address with the low scale of single storey built environment directly to its North . This site provides a transition in scale to the main estate gateway site and scale at the Meadows location .

POTENTIAL DEVELOPMENT TO SOUTH

To the left is indicative development shown to the south of the site at 7 & 8 storeys, a height that was previously favourably commented on by ABP in previous applications in this area. This would provide for a transition in scale to the meadows to the north.

12 Principles of Urban Design

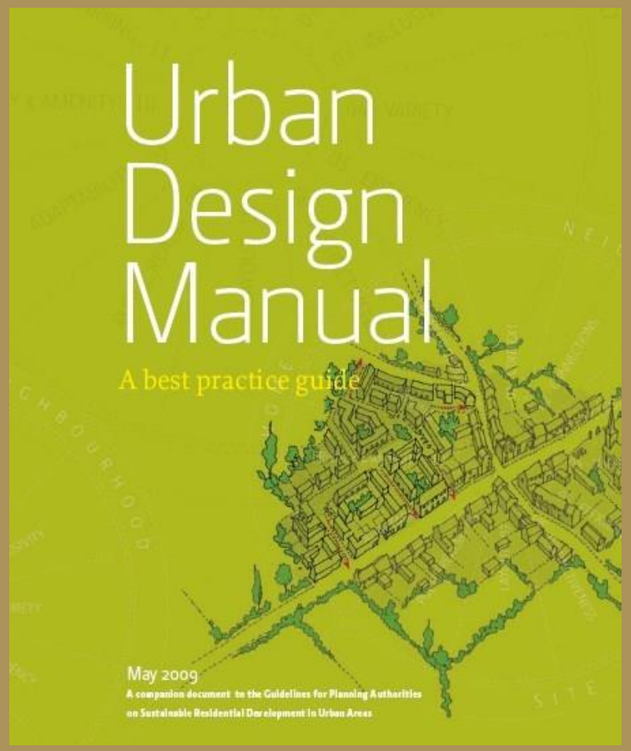
THE 12 PRINCIPLES OF QUALITY URBAN DESIGN

From inception the design has been considered in its response to sustainable place making with the 12 key principles of design (Urban Design Manual 2009) as central generators for the proposal. The 12 key criteria are briefly set out below :

CONTEXT

Given the particularly sensitive landscape, heritage and cultural conditions of the site, detailed analysis of the context plays a crucial role in each design phase of the proposal. The Bessborough House and Demesne situated south-east of the site was first constructed in c.1760, with the addition of the Farmyard complex and Folly in the 1880s. The conversion of the house to a convent in 1922 resulted in further buildings being added to the complex. Each of the sites feature formal landscaping and distinctive boundary treatment.

Careful placement, orientation and form development is consistently measured against former ralline geometry & the existing structures to ensure that overshadowing, encroaching and intrusive visual impact is prevented by the scheme. Planimetric studies draw on existing geometries and building hierarchies to inform the contextualised nature of the scheme as well as these to support and maintain the orderly evolution of the site. The development retains and enhances the landscape setting by opening large portions of the site to public access which otherwise remains unavailable as an amenity for the wider community.



EASTERN ENTRANCE LINKING PEDESTRIANS THROUGH MAIN PUBLIC REAM SPINE TO BRIDGE OVER GREENWAYTO EAST

CONNECTIONS

The new residents benefit from clear road network to the edge of the Western boundary with greenway connection via proposed pedestrian bridge to the East. The site benefits from planned CMATS bus links and a nearby (5 minute walk) CMATS light rail station proposal. The scheme has been designed to maximise this connectivity by linkages to existing greenway infrastructure, notably 'The Line' Greenway. The scheme's proposal of a new pedestrian footbridge links the connective spine of this Greenway to the proposed site and greater surrounding area on the east, as well as a vast number of amenities to the east. Residents have available retail offerings in walking distance of Mahon Point while the city centre is a 10 minute cycle away for employment, retail and cultural offerings.

NEW PEDESTRIAN BRIDGE CONNECTING GREENWAY

CLEAR ROUTE THROUGHT THE SCHEME FOR EASY NAIVGATION

INCLUSIVITY

The site strategy prioritises ease of access and passage for all residents and pedestrians. It is made permeable by a new pedestrian streetscape, which offers a range of communal facilities in an open public realm. Situated at the centre of this route, an accessible lift and stair core pavilion acts as a sculptural reference point and provides equal access to parking and all residents. The landscaping provides an attractive variety of materials, planting, seating and child friendly open greens without causing any physical obstruction to the path. Several units situated at ground floor level supply additional floor space to allow for changing needs of the residents. The streets north and west of the site are clearly cited to be taken in charge, benefitting any future developments adjacent to the scheme. From each point of access, a clear line of vision through the entire site is achieved, preventing unnecessary disorientation when traversing or navigating the area.

VARIETY

The development provides a terrace of single storey studio apartments (2.1%), 1 bed apartments (40%), 2 bed apartments (53.6%) and 3 bed apartments (4.3%). The character of these spaces vary across the scheme to attract a diverse range of residents. Situated west of a high density employment district, the scheme offers convenient proximity to working environments and widely popular amenities. Among the communal facilities located on the proposed streetscape, a broad variety of adaptable workspace is provided. Designed to suit many requirements, these areas include hot-desks, breakout spaces, private offices and meeting rooms, each equipped with shared kitchen facilities encouraging community interaction. South-facing lounge areas look out onto the streetscape and cater for all age groups. A 35 child creche facility is also provided on site to add to the facilities provided for the residents to add to existing childcare facilities immediately to the south of the site. Direct access to the greenway provides an extensive amenity to each resident, as well as sustainable access to the city centre.

EFFICIENCY

The scheme proposes to transform a previously inaccessible greenfield site to a safe, lively and attractive community area. The design of each building and surrounding landscape function optimises solar orientation, with 43.2% of units achieving dual aspect orientation. The proposal is in a highly sustainable location with services & employment centres nearby, with the city a short cycle away on existing green infrastructure. All buildings are designed to current NZEB standards high insulation values and efficient energy systems. All waste management on the facility has designated recycling areas for residents and will be actively promoted and monitored by management.

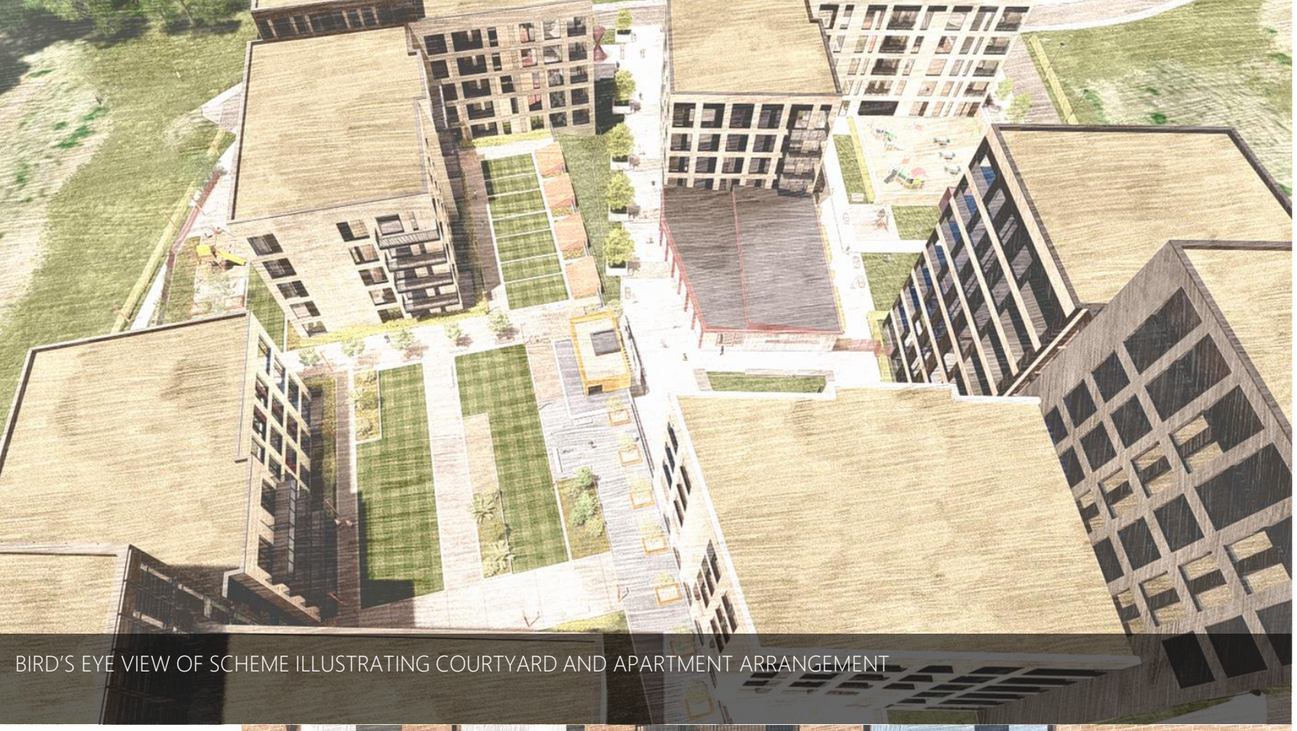
DISTINCTIVENESS

The scheme adapts several distinctive architectural features at key locations on the site. These structures are easily visible while maintaining a modest scale which is engaging and emotive to the individual. Among these are the core pavilion (centre), the pedestrian footbridge and café with arched arcade (east), location for public sculpture (west), the creche and studio terrace (north), the raised terrace (south). Collectively, these elements contribute to the character and identity of the newly developed area. With this, they adopt new functions of providing safety, a reference, a visual stimulus, a meeting point. As well as this, each building utilises alternative material arrangements and an asymmetrical form to further distinguish a unique identity.

WEST FACING VIEW OF PUBLIC REALM. WORKSPACE (left) ARCHWAY TO BRIDGE (centre) CORE PAVILION (right)

BIRD'S EYE VIEW OF PUBLIC REALM, SOUTHERN AND NORTHEN SEMI-PRIVATE COURTS (left and right)

SOUTH-EASTERN ENTRANCE TO SCHEME SHOWING BUILDING D AND SURROUNDING PUBLIC REALM



BIRD'S EYE VIEW OF SCHEME ILLUSTRATING COURTYARD AND APARTMENT ARRANGEMENT

LAYOUT

The four L-shaped buildings proposed by the scheme act harmoniously with an appropriate layout of the surrounding built heritage asymmetric courtyards nearby. Convenient and clear desire lines are optimised by the landscape design and central core pavilion. Public realm is centralised and activated by communal amenities. The carpark entrance at the south-west corner of the site links to the adjacent existing road, allowing for maximised periodisation and quality of recreational space. Semi-private community courtyards are provided for each building; the south court, distinguished by a raised podium level and the north court, overlooked by residential amenity spaces, the community creche, residential facilities and building entrances.

WEST FACING VIEW OF ARCADE AND CAFÉ APPROACHING NEW STREETSCAPE

PUBLIC REALM

The public realm which spines through the sight is distinguished by multiple design elements. It follows a direct path from the pedestrian bridge on the west to the road on the east. Along the street, the pedestrian is met with a double height public café, attractive seating areas, full length street front windows (of gym, lounges, etc.) and a sculpture which punctuates the approach to the road. This public realm is overlooked by over 50% of the residents, reinforcing the feeling of safety and ownership of place. Landscaping distinguishes the public realm from the semi-private by using varied ground material and patterns, level changes, path widths, buffer zones and appropriate gates where necessary.

ADAPTABILITY

The structural system avoids load bearing walls and is composed entirely of a column and beam system in either concrete or steel depending on implementation market conditions. This allows for the potential of future adaptability / reconfiguration to larger units if the future demands.

All buildings have an over sizes systems room at the ground floor to allow for the possibility of future modification to systems and services as technology continually evolves. Currently all units are designed to fully NZEB compliant with high levels of insulation, air tightness and renewables sources proposed.

PRIVACY AND AMENITY

The building is set out to have appropriate distances between living rooms and neighbouring properties. All ground floor units enjoy a privacy landscape buffered area from trafficked areas while a significant portion also have and elevated ground floor aspect over these areas. 43.2% dual aspect is achieved across the scheme. Versatile and efficient storage solutions are incorporated in each unit to adapt to the evolving needs of the resident.

VIEW OF RAISING SOUTHERN SEMI-PRIVATE COURTYARD SHOWING ACCESS TO CORE PAVILION AND PUBLIC REALM BELOW

EXISTING ROAD APPROACHING THE SCHEME FROM THE NORTH EAST

CAR PARK ACCESS POINT TO SOUTH WEST CORNER

PARKING

Parking is accommodated below a raised podium on the southern half of the site. The carpark entrance is clearly signed and accessed at the south-west corner. The centralised core pavilion ensures access to each unit from the carpark is equal and convenient. Bicycle stores are provided for each building, with their access affronting semi-private communal courts.

DETAILED DESIGN

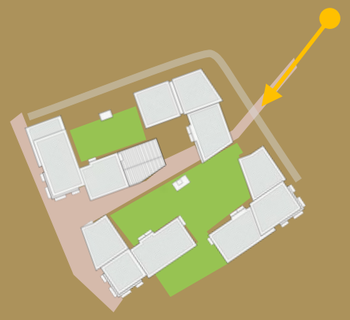
Consideration has been given to the detailed design of the development from materials maintenance to glazing elements design. The materials are complimentary with a simple palette of materials proposed to give a clear, defined aesthetic with crisp rigour to a formal contemporary presentation to the environment. Maintenance and access arrangement has been allowed for in all aspects of façade landscaping upkeep.

NORTH ROAD TO BE OFFERED FOR TAKING IN CHARGE

Overview

THE NEW BRIDGE CONNECTS ONTO THE EXISTING DOWN RAMP WHICH CONNECTS TO THE GREENWAY AND ALSO WIDER MAHON CENTRE TO THE EAST

THE NEW BRIDGE ALLOWS BIKERS AND PEDESTRIANS ACCESS THE WIDER SITE OF BESSBOROUGH VIA A NEW ACTIVE PUBLIC STREETSCAPE



THE ROUTE IS DESIGNED TO BE ‘EVENTFUL’ AND OF INTEREST WITH A NUMBER OF SPATIAL NODES PASSED THROUGH

A PUBLIC CAFÉ IS LOCATED TO THE WEST OF THE NEW BRIDGE

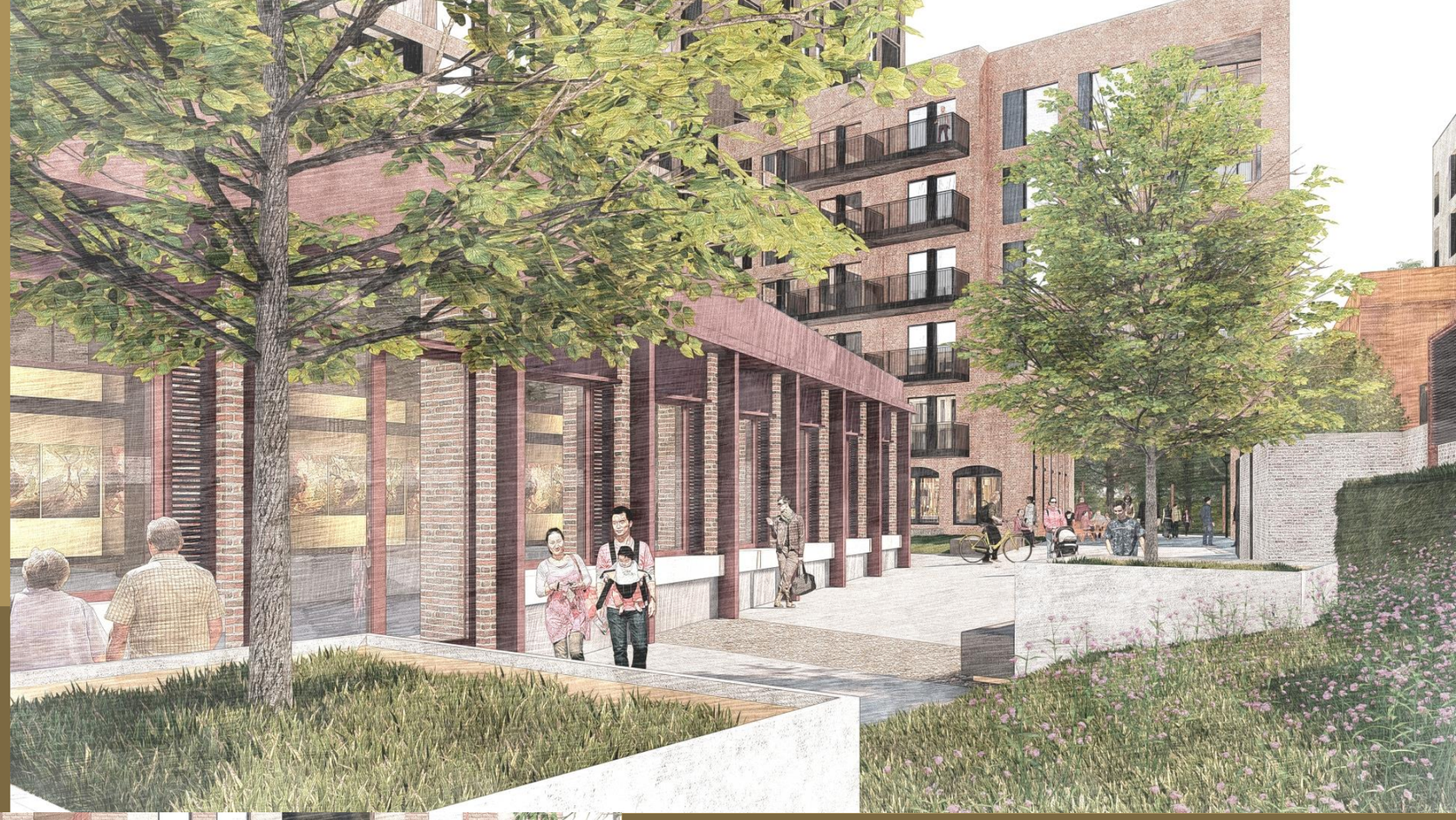
INTERMITENT LANDSCAPE AREAS AND FEATURES ARE EXPERIENCED BY USERS ALONG THE WAY

COMMUNAL USES ARE LOCATED TO GIVE ACTIVE FRONTAGES TO THE NEW STREET

A CENTRAL FEATURE CORE PAVILION GIVES RESIDENTS ACCESS TO AMENITY AND CAR PARKING AREAS

THE MAIN AMENITY AREA IS RAISED OVER HALF PODIUM TO ADD TO SEPARATION FROM PUBLIC AREAS

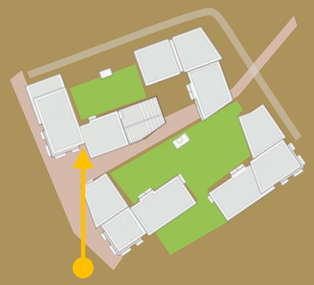
VIEW EAST ALONG NEW SPINE STREET SCAPE



WESTERN ARRIVAL POINT WITH INDICATIVE PUBLIC ART PIECE TO THE FOREGROUND

WESTERN ARRIVAL AREA

PLACEMAKING OFF COMMUNAL AREAS TO WEST



WESTERN STREETSCAPE

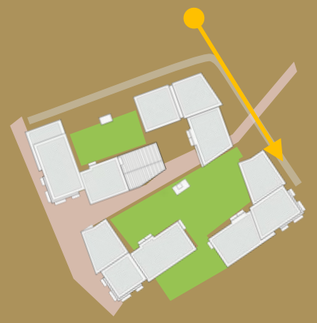
VIEW FROM LANDS TO SOUTH / CSSA MEMORIAL LOCATION IDENTIFIED

OVERLOOK ROUTE TO SOUTHERN BOUNDARY

OVERLOOKED ROUTE TO SOUTHERN BOUNDARY

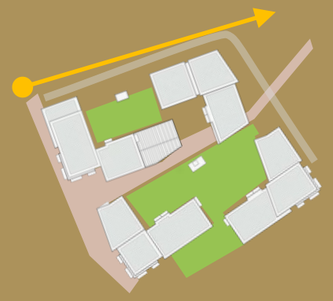
VIEW NORTH ON EASTERN BOUNDARY

VIEW SOUTH TO EASTERN BOUNDARY



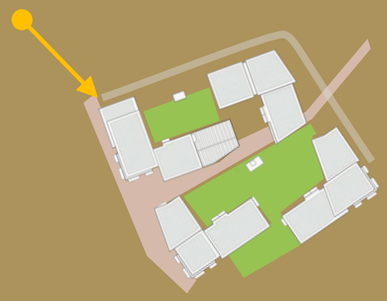
VIEW OF NORTH EASTERN CORNER

VIEW OF NORTHERN ROADWAY TO BE TAKEN IN CHARGE



VIEW OF NORTHERN ROADWAY TO BE TAKEN IN CHARGE

VIEW FROM APPROACH TO NORTH



Amenity

	(sq.m.)
Communal Amenity area (north)	503
Communal Amenity area (south)	1,616
TOTAL PRIVATE AMENITY	2,119
TOTAL PUBLIC OPEN SPACE	3,958
Creche	315

Gated access

Site boundary

AMENITY

Separation is offered to private amenity by raised areas

Clear separation to public routes and private areas with level change to South

A northern amenity area has gated access

A variety of landscape treatments, hard and soft are proposed.

Public realm areas are of high value with supervision from communal areas

Seating and social spaces are provided along active frontages

A café is provided at the green way bridge entrance area

Play area to South

Amenity walk to South

COMMUNAL AREAS

Communal areas are located off the central public realm/streetscape across the ground floors of building A, B, & D. This space designed be highly active and the proposed uses have the opportunity to interact with the street and offer live frontages with on street seating areas.

A range of uses are provided for from alternative lounge areas to a games rooms area. A residents gym and meeting room is also provided.

COMMUNAL AREAS

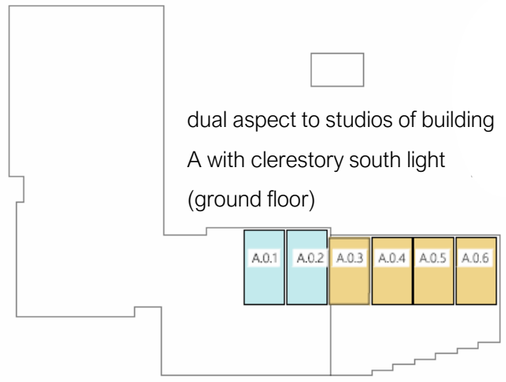
BUILDING DISTANCES (m)

STOREY HEIGHTS

ASPECT

The site is in a highly accessible location near to the city centre with excellent connectivity. During the design phase the scheme evolved where it was required to deliver the main public realm axis east west into the main Bessborough estate – providing good quality street frontage with high quality design for supervision and active frontages. Of note is the requirement through pre consultation to provide high quality design and good quality street frontage , centrally by way of the public realm spine , to the North over the new street to be taken in charge and also to the West on the main street frontage to Buildings A & D.

SPPR 4 of the Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities 2020 states that 33% dual aspect is acceptable in such cases where high quality street frontage is required in a highly accessible location , such as Bessborough. The scheme achieves 43% dual aspect given this street frontage urban realm constraint requirement to extensive portions of the design .



SPPR 4 of the Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities 2020 states:

(i) A minimum of 33% of dual aspect units will be required in more central and accessible urban locations, where it is necessary to achieve a quality design in response to the subject site characteristics and ensure good street frontage where appropriate .

3.17 Accordingly, it is a policy requirement that apartment schemes deliver at least 33% of the units as dual aspect in more central and accessible . . . . locations, i.e. on sites near to city or town centres, close to high quality public transport or in SDZ areas, or where it is necessary to ensure good street frontage and subject to high quality design. ……..'

	DUAL ASPECT	121	43%
	EAST / WEST	73	26%
	SOUTH	47	17%
	NORTH OVER AMENITY	39	14%

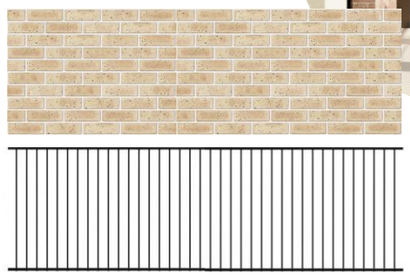
A = WINTER BALCONY

TYPICAL FLOOR PLAN

Materiality

BRICK COURSING: ORANGE BRICK WITH BRIGHT POINTING

BRICK COURSING: SANDALWOOD YELLOW WITH BRIGHT POINTING



PAINTED GALVASNISED STEEL BALCONY HANDRAILS

VERTICAL LARCH TIMBER CLADDING

POWDER COATED ALUMINIUM PANEL IN DARK RED

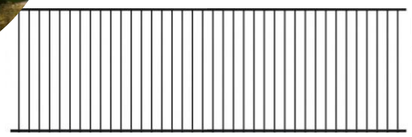
POWDER COATED ALUMINIUM PANEL IN DARK GREY COURSE FINISH

RENDERING: SELF-CLEANING SYSTEM, OFFWHITE FINISH

POWDER COATED ALUMINIUM PANEL IN CHAMPAGNE GOLD

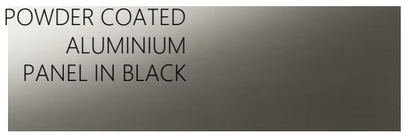
MATERIALITY: BUILDING A

BRICK COURSING:
ORANGE BRICK WITH
BRIGHT POINTING

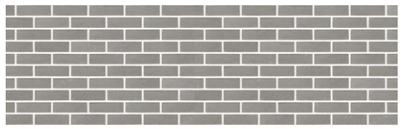


PAINTED GALVASNISED
STEEL BALCONY
HANDRAILS

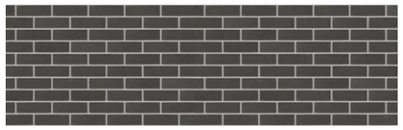
TEMPERED GLASS
BALUSTRADE



POWDER COATED
ALUMINIUM
PANEL IN BLACK



BRICK COURSING: LIGHT
GREY BRICK WITH BRIGHT
POINTING



BRICK COURSING: DARK
GREY BRICK WITH BRIGHT
POINTING

POWDER COATED
ALUMINIUM PANEL
IN DARK RED

POWDER COATED
ALUMINIUM PANEL
IN CHAMPAGNE GOLD

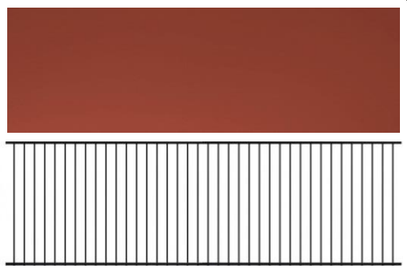
MATERIALITY: BUILDING B

POWDER COATED ALUMINIUM SPANDRAL IN CHAMPAGNE GOLD

POWDER COATED ALUMINIUM SPANDRAL IN BLACK

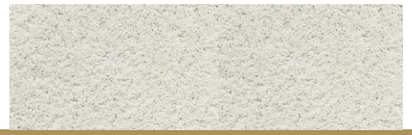
BRICK COURSING: ORANGE BRICK WITH BRIGHT POINTING

POWDER COATED ALUMINIUM GLAZING SYSTEM IN DARK RED



PAINTED GALVASNISED STEEL BALCONY HANDRAILS

BRICK COURSING: SANDALWOOD YELLOW WITH BRIGHT POINTING



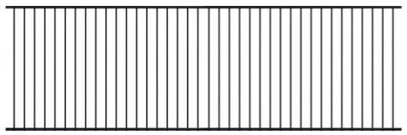
RENDERING: SELF-CLEANING SYSTEM, OFFWHITE FINISH

POWDER COATED ALUMINIUM PANEL IN GREY

MATERIALITY: BUILDING C

RENDERING:
SELF-CLEANING
SYSTEM,
OFFWHITE FINISH

POWDER COATED
ALUMINIUM
PANEL IN BLACK



PAINTED
GALVASNISED
STEEL BALCONY
HANDRAILS

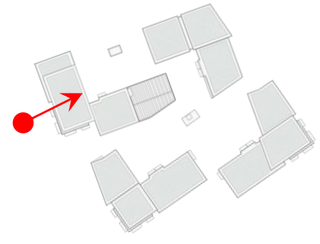
BRICK COURSING:
ORANGE BRICK WITH
BRIGHT POINTING

VERTICAL
LARCH
TIMBER
CLADDING

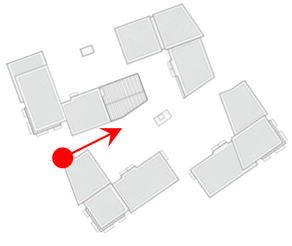
RENDERING:
SELF-CLEANING
SYSTEM,
NATURAL LIME
FINISH

MATERIALITY: BUILDING D

MATERIALITY: BUILDING A – WEST FAÇADE



MATERIALITY: BUILDING A – NEW STREET



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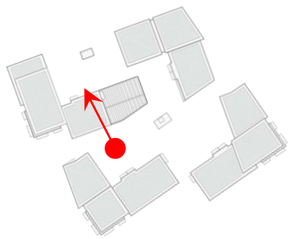

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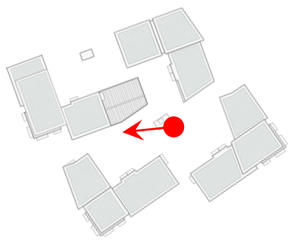
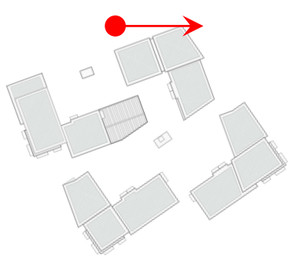
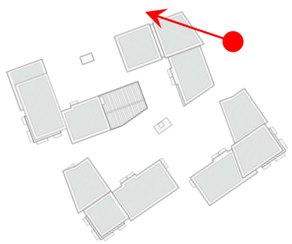


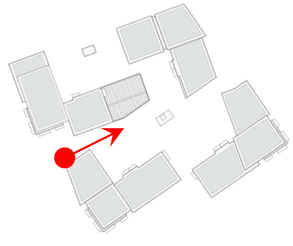
MATERIALITY: BUILDING B – NORTH ROAD



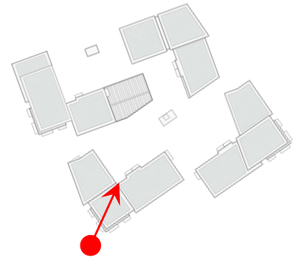
MATERIALITY: BUILDING B – NORTH CORNER



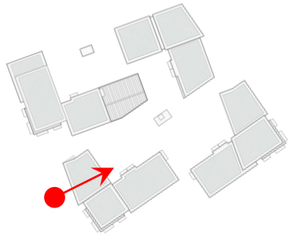
MATERIALITY: BUILDING A – NEW STREET



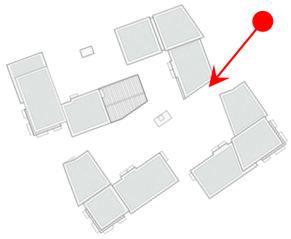
MATERIALITY: BUILDING C – SOUTH WEST CORNER



MATERIALITY: BUILDING D –EAST FAÇADE

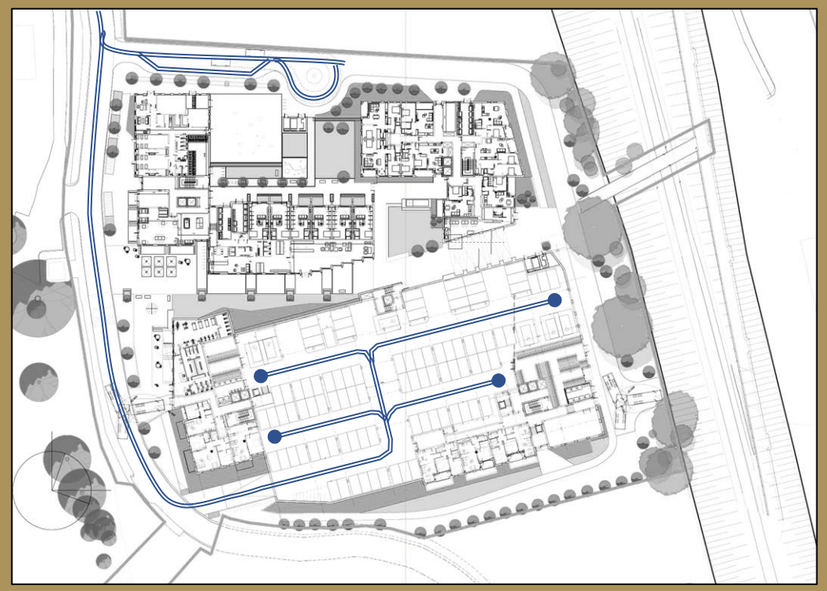


MATERIALITY: BRIDGE – EAST APPROACH



PEDESTRIAN

CYCLE



CAR

SERVICE

USER CIRCULATION

Accessibility Statement

ACCESSIBILITY STATEMENT

The proposed Strategic Housing Development seeks to comply with the principles of Universal Design (to encourage access and use of the development regardless of age, size, ability or disability).

The proposed development must meet the requirements of Part M of the Building Regulations.

Part M 2010 came into operation on the 1st January 2012 and the requirements of Part M 2010 must be followed subject to certain Transitional arrangements.

The Design Team recognises that since the introduction of the Disability Act in 2005 Irish Building Regulations (See Figure 1 above) have been revised with Universal Design in mind and a more comprehensive technical guidance document is now in place. This document is known as the Building Regulations 2010 Technical Guidance Document M - Access and Use' or alternatively TGD M 2010.

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

"The materials, methods of construction, standards and other specifications (including technical specifications) which are referred to in this document are those which are likely to be suitable for the purposes of the Regulations. Where works are carried out in accordance with the guidance in this document, this will, prima facie, indicate compliance with Part M of the Second Schedule to the Building Regulations (as amended). However, the adoption of an approach other than that outlined in the guidance is not precluded provided that the relevant requirements of the Regulations are complied with.

Those involved in the design and construction of a building may be required by the relevant building control authority to provide such evidence as is necessary to establish that the requirements of the Building Regulations are being complied with".

The Design Team notes that TGD M 2010 is the minimum guidance to show compliance with the requirements of the Part M of the Building Regulations. The Design Team is also firmly committed to achieving universal access in the building and are committed to ensuring equal access for all. All people regardless of ability can approach and gain independent easy access to the proposed works (e.g. sloped access routes; and level access routes, stepped access routes, common areas .

People can circulate within the building and use the facilities (e.g. Lifts; Part M compliant stairwells; door design and surface finishes in common areas).

People can access the main facilties provided within the development.

The proposals will be subject to a DAC application (Disability Access Certificate) to the local BCA (Building Control Authority). The requirements of the application as well as any additional requirements/conditions raised by the BCA will be implemented in full in the course of construction of the proposal.

Building Life Cycle

BUILDING LIFE CYCLE

1.0 ASSESSMENT OF LONG-TERM RUNNING AND MAINTENANCE COSTS

Management of the Owners' Management Company's Assets

Service Charge Budget

2.0 MEASURES TO MANAGE AND REDUCE COSTS FOR THE BENEFIT OF RESIDENTS

Building Design

External Building Fabric Material Selection

Internal Building Fabric Material Selection

Energy and Building Services

Landscape Material Selection

Waste Management Plan

Human Health and Well Being

Transport & Accessibility

3.0 BUILDING INVESTMENT FUND

INTRODUCTION

This Building Life Cycle Report has been prepared for the proposed residential development the Meadows at Ballinure , black rock Cork city in accordance with the planning guidelines *Sustainable Urban Housing: Design Standards for New Apartments (Guidelines for Planning Authorities) 2020*.

Section 6.13 of the guidelines requires that apartment applications shall:

"include a building lifecycle report which in turn includes an assessment of long term running and maintenance costs as they would apply on a per residential unit basis at the time of application, as well as demonstrating what measures have been specifically considered by the proposer to effectively manage and reduce costs for the benefit of the residents."

This Building Life Cycle Report document sets out to address the requirements of Section 6.13 of the Apartment Guidelines. The report is broken into two sections as follows:

Section 1: An assessment of long term running and maintenance costs as they would apply on a per residential unit basis at the time of application.

Section 2: Measures specifically considered by the proposer to effectively manage and reduce costs for the benefit of residents.

0.1 DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed development provides for the construction of a residential development of 280 no. residential apartment units with supporting tenant amenity facilities, crèche, and all ancillary site development works. The proposed development includes 280 no. apartments to be provided as follows: Block A (6 no. studio apartments, 14 no. 1-bedroom, 34 no. 2-bedroom & 1 no. 3-bedroom over 1-6 storeys), Block B (37 no. 1-bedroom & 49 no. 2-bedroom over 6-10 storeys), Block C (31 no. 1-bedroom, 36 no. 2-bedroom & 6 no. 3-bedroom over 5-9 storeys) and Block D (30 no. 1-bedroom, 31 no. 2-bedroom & 5 no. 3-bedroom over 6-7 storeys).
The proposal includes a new pedestrian/cycle bridge over the adjoining Passage West Greenway to the east, connecting into the existing down ramp from Mahon providing direct access to the greenway and wider areas.
The proposed development provides for outdoor amenity areas, landscaping, under-podium and street car parking, bicycle parking, bin stores, 2 no. substations one of which is single storey free standing , a single storey carpark access building, public lighting, roof mounted solar panels, wastewater infrastructure including new inlet sewer to the Bessborough Wastewater Pumping Station to the west, surface water attenuation, water utility services and all ancillary site development works. Vehicular access to the proposed development will be provided via the existing access road off the Bessboro Road.

SECTION 1

ASSESSMENT OF LONG-TERM RUNNING AND MAINTENANCE COSTS

Management of the Owners' Management Company's assets

A licensed Property Service Provider (PSP) will be contracted to the Owners Management Company (OMC) that will be formed for the residents. The PSP will ensure that the interests of the residents are protected by executing the block management plans efficiently. The PSP will be responsible for the good management of other support services to include finance, administration, insurance, emergency assistance support, company secretarial and communications. As governed by the Multi Unit Development Act 2011, an OMC shall not enter into a contract in excess of 3 years with any supplier. The OMC, by good practice, will re-tender the services received at least each 3 years.

The assets to be transferred to the OMC in accordance with the Act will include the common areas and external fabric of the multi-unit buildings, as well as landscaped areas in their vicinity.

The OMC's operational budgets will benefit from the utilisation of a Planned Preventative Maintenance (PPM) programme. The PPM will be completed annually for each apartment and duplex apartment building to include the shared internal and external common areas. Consideration will be given to the ongoing maintenance of the buildings assets in an effort to protect the asset lifecycle and to identify when replacements/upgrades are required. Items covered will guide which services are required, the timing and number of occurrences of same. Typical PPM programmes will detail the timing of the visits for fire alarm maintenance, lift maintenance, the landscaping specification, waste management protocols, along with day to day cleaning requirements.

Service Charge Budget

A service charge budget will be compiled to put in place funding requirements as costed in the Planned Preventative Maintenance programme and also in the Building Investment Fund report. The budget will be apportioned to unit owners in a fair and equitable way in accord ance with the MUDs Act, with the collection of fees into dedicated Owners' Management Company (OMC) bank accounts.

The OMC will promote competitive tendering of running and maintenance services to help minimize charges for residents. The service suppliers will be discharged the payment for their services from these bank accounts. Monthly reports of operational and financial matters will be provided to the OMC executives and annual to the members at the general meeting.

2.0 MEASURES TO MANAGE AND REDUCE COSTS FOR THE BENEFIT OF RESIDENTS

The proposed layouts make efficient use of the land. The buildings have been designed with a low number of stair and lift cores in order to increase efficiencies and ensuring that service charges and maintenance costs faced by residents into the future are kept at reasonable levels.

The apartment design has followed the principles of the BRE guide - "Site Layout Planning for Daylight and Sunlight". Good levels of sunlight will also be available in the development's amenity areas. When this guidance is followed the end result is generally a site which is positioned and laid out in such a way which will provide adequate levels of sun lighting and daylighting while creating an ambience that will appeal to any building occupant and reduce the lighting costs.

Lifecycle costs are also determined by the durability and maintenance requirements of materials. We have selected the very highest standard of finishes across the project. Low maintenance cladding materials such as brick finishes are proposed to minimise the impact of façade maintenance. Balconies are designed to be capable of fabrication offsite, resulting in higher standard of finish, reducing damage during construction and improved durability. Building materials proposed for use on apartment block elevations and in the public realm achieve a durable standard of quality that will not need regular fabric replacement or maintenance outside general day-to-day care. The choice of high quality and long-lasting materials such as brickwork, aluminium , and steel as well as hardscape in the semi-public and private realms will contribute to lower maintenance costs for future residents and occupiers.

This report reflects the outline material descriptions and examples of typical materials and systems used for schemes of this nature and their associated lifespans and maintenance requirements. All information is therefore indicative subject to detailed design development.

As the building design develops this document will be updated and a schedule will be generated from the items below detailing maintenance and replacement costs over the lifespan of the materials and development constituent parts. This will enable a robust schedule of building component repair and replacement costs which will be available to the property management company so that running and maintenance costs of the development are kept within the agreed annual operational budget. A general outline of the primary materials used in the scheme can be section 2.2 .

Measures are addressed under following headings:

- (2.1) Building Design
- (2.2) External Building Fabric Material Selection
- (2.3) Internal Building Fabric Material Selection
- (2.4) Energy and Building Services
- (2.5) Landscape Material Selection
- (2.6) Waste Management Plan
- (2.7) Human Health and Well-being
- (2.8) Transport and Accessibility

2.1 BUILDING DESIGN

Measure	Description	Benefit
Daylighting to units	As outlined in 'Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (December 2020)': to have regard for quantitative performance approaches to daylight provisions 'outlined in guides like the BRE guide 'Site Layout Planning for Daylight and Sunlight' (2nd edition) or BS 8206-2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting' when undertaken by development proposers which offer the capability to satisfy minimum standards of daylight provision'. Please refer to Daylight Assessment Report prepared by DKP Consulting Engineers submitted with this application.	Reduces the requirement for continuous daylighting, thus reducing the expense of artificial lighting
Daylighting to circulation areas	Natural lighting provided via tall windows at circulation cores.	Reduces the requirement for continuous artificial lighting.
External Lighting	External lighting will comply with the latest standards and achieve: □Low-level lighting □Utilise low voltage LED lamps □Minimum upward light spill Each light fitting is to be controlled via an individual Photoelectric Control Unit (PECU). The operation of the lighting shall be on a dusk-dawn profile.	Lighting will be designed to achieve the required standards, provide a safe environment for pedestrians, cyclists, and vehicular traffic, provide surveillance and limit the impact on the artificial lighting on surrounding existing flora and fauna.

2.2 EXTERNAL BUILDING FABRIC MATERIAL SELECTION

Measure	Description	Benefit
Brickwork facade	Primary feature facade cladding material used. Lifecycle of 100+ years. Mortar pointing has shorter lifecycle of 25-50 years.	Extremely durable, with low maintenance requirements. Preventative maintenance by monitoring mortar joint deterioration ensures longevity of material.
Render	Used on buildings C & D. Where specified it will be a pigmented render system with lifecycle of circa 25 years. Cleaning of algae and other staining is recommended annually by property maintenance team.	Finish does not require repainting every few years.
Metal Cladding walls /Curtain walling	Aluminium Metal facade panels on galvanised metal support system with glazing openings and as vertical spandrel panels with typical life expectancy of 35 years.	Aesthetic impact, durability and weathering. Annual inspection and cleaning every 5 -10 years.
Metal Cladding roofs	Zinc standing seam sloped roofs to single storey elements life expectancy of 30 years.	Aesthetic impact, durability and weathering. Annual inspection and cleaning every 10 years
Timber Cladding	Used to North of building D and to East of building A – western red cedar or similar to have low maintenance un-treated finish. This material has typical life expectancy of 25 -30 years.	Aesthetic impact in heritage setting , durability and weathering. Annual inspection and treatment / cleaning not required .
Flat Roofs	TPO or similar roofing membrane with 22- 30 year lifespan installed to manufacturer's proven details. Appropriate protection for access to ensure maintenance of any roof equipment will be carried out without any damage to the membrane. Regular maintenance checks by property maintenance team.	Proven roofing system with regular maintenance prevents needs for repairs and additional cost to residents.
Sedum Roof	Extensive Green Roof System. Average life cycle of 13-35 years. Life cycle extended with robust proven detailing and appropriate regular maintenance quarterly every year.	Attenuation for storm water run off and less burden and maintenance of rainwater goods. Increased thermal and sound insulation to the building, aesthetic appeal and increased biodeversity.
Windows and Doors	All units double glazed with thermally broken frames in uPVC or Aluminium.	Minimal ongoing maintenance
Steel Balconies	Prefinished powder-coated and capability to be manufactured off site	Minimal ongoing maintenance.
Steel and Glass Balustrades	Powder coated steel finish and laminated glass	Requires minimal ongoing maintenance

2,3 INTERNAL BUILDING FABRIC MATERIAL SELECTION

Measure	Description	Benefit
Floors – apartment stair cores and entrances	Selected anti-slip porcelain or ceramic floor tile with inset mat well at entrancedoors as required. Life span of 20-25 years.	Low maintenance and easilycleaned.
Floors – lobbies/corridors	Selected carpet inlay on underlay. 13 years life span typically. Regular cleaningby property maintenance team.	Attractive aesthetic for residents and flexibility tochange in the future.
Walls	Selected contract vinyl wallpaper feature or selected paint finish with primer. Wall protection at heavy traffic areas with plasterboard substrate adjacent to lift cores where furniture moving will damage wall fabric. Finish lifespan of 2- 10 years, regular maintenance required.	Attractive aesthetic for residents and flexibility to change appearance in thefuture.
Ceilings	Selected paint finish with primer to skimmed plasterboard ceiling.	Decorative and durable finish.
Internal balustrades and handrails	Painted metal balustrade or proprietary glazed panel system face fixed to stair stringer/landing edge with polished stainless-steel brackets and clamps to manufacturers installation details.	Durable finish.
Internal Doors and Frames	Selected primed and painted solid internal doors. Glass and aluminum doorsystem to glazed entrances.	Durable finish with regular inspection and maintenance.

2.4 ENERGY AND BUILDING SERVICES

Measure	Description	Benefit
Nearly Zero Energy Building specifications (nZEB)	The dwellings will be nearly-Zero Energy dwellings.	Reduce primary energy demand by 70% viz. 2005 standards.
BER targets	A2	Reduce primary energy demand by 70% viz. 2005 standards.
Highly insulated building fabric	Ground floors: U<= 0.12 W/m^{2}K External walls: U<= 0.15 W/m^{2}K Roof: U<= 0.11 W/m^{2}K Windows: U<=1.3 W/m^{2}K Solar transmittance >= 0.70	Effective reduction of thermal energy demand
Thermal bridging	Acceptable Construction Details employed. Thermal bridging measured, with resultant values lower than the default.	Effective reduction of thermal energy demand
Airtightness	3 to 3.5 m^3/m^2.h @ 50 Pa maximum	Effective reduction of thermal energy demand
General ventilation	Demand-controlled mechanical extract system or mechanical heat recovery system	Effective reduction of thermal energy demand
Heating / hot-water controls	Time clocks and thermostats for each heating / hot-water zone	Effective reduction of thermal energy demand
Pumping	Variable speed pumps	Effective reduction of thermal energy demand
Lighting	100% LED lighting	Effective reduction of electrical energy demand

2.5 LANDSCAPE MATERIAL SELECTION

Measure	Description	Benefit
Paving and Decking Materials	Use of robust high-quality materials and detailing to be durable for bikes, play, etc.	Ensures the longevity of materials.
Site Layout & Landscaping Design	High quality landscaping both hard surface (for the cycle /car parking and pavements) and soft landscaping with planting and trees. The landscaping will be fully compliant with the requirements for Part M / K of the Technical Guidance Documents and will provide level access and crossings for wheelchair users and pedestrians with limited mobility. Designated car parking including accessible & visitor car parking reduces the travel distances for visitors with reduced mobility. The landscape design approach is to provide a variety of high- quality durable communal recreation areas for residents within the blocks which feature a range of quality tree, shrub and herbaceous planting. Hard landscape paving and decking materials will be robust and durable and installed using proven details to minimise maintenance requirements.	Plenty of room for cycles and pedestrians along with car spaces provide a good balance between pedestrians and car users. Wheelchair user-friendly. A landscape maintenance company will be retained by the OMC(s) to ensure regular maintenance improves the quality of the living environment for all residents.
Balconies & openable windows	Use of balconies & openable windows allow individuals to clean windows themselves.	Reduces the cost and reliance on 3rd party cleaning & maintenance.

2.6 WASTE MANAGEMENT

Measure	Description	Benefit
Construction Waste Management Plan	The application is accompanied by a Construction Waste Management Plan by the applicants.	The report demonstrates how the scheme complies with best practice.
Storage of Non-Recyclable Waste and Recyclable Household Waste	Domestic waste management strategy: Grey, brown and green bin distinction Competitive tender for waste management collection who will prepare an operational waste management plan for the site.	Helps reduce potential waste charges.
Composting	Organic waste bins to be provided throughout.	Helps reduce potential waste charges

2.7 HUMAN HEALTH AND WELL-BEING

How human health and well-being is been considered:

Measure	Description	Benefit
Natural / day light	The design, separation distances and layout of the apartment blocks have been designed to optimise the ingress of natural daylight/ sunlight to the proposed dwellings to provide good levels of natural light.	Reduces reliance on artificial lighting, thereby reducing costs
Accessibility	All units will comply with the requirements of Building Regulations, Technical Guidance Documents Parts K and M.	Reduces the level of adaptation, and associated costs potentially necessitated by residents' future circumstances.
Security	The scheme is designed to incorporate passive surveillance with the following security strategies likely to be adopted: • CCTV monitoring details • Secure bicycle stands • Overlooked communal open space in the form of a courtyard.	Helps to reduce potential security/ management cost
Natural Amenity	The site has a very high quality of natural amenity location within the wider masterplan area with large publicly accessible amenity areas . The immediate environment to the East provides a remarkable amenity in the form of a well established greenway for walking ,running and cycling .	Facilitates community interaction, socializing play & exercise - resulting in improved well being

2.8 TRANSPORT & ACCESSIBILITY

Transport considerations for increasing the update of the use of public transport, cycling and walking and reducing the ownership of private cars and reducing oil dependency:

Measure	Description	Benefit
Access to Public Transport	The development is located nest to the main passage west /city greenway on the boundary to the east. The site is located next to the nearby shopping and employment areas within 10 minutes walk away . A public bus service is provided to the North connecting to the city centre	Availability, proximity to bus services and greenway reduces the reliance on the private motor.
Storage of Non-Recyclable Waste and Recyclable Household Waste	Domestic waste management strategy: Grey, brown and green bin distinction. Competitive tender for waste management collection.	Helps reduce potential waste charges.
Composting	Organic waste bins to be provided throughout	Helps reduce potential waste charges.

3.0 Building Investment Fund

In accordance with the MUDs Act, the OMC(s) will allocate a certain portion of funds towards a sinking fund, in order to adequately resource long-term replacement of components.
The Building Investment Fund table below illustrates what could be incorporated in the calcu- lation of a Sinking Fund:

Element	Life Expectancy
Roofs	
Replacement roof covering incl. insulation to main roofs	30
Replacement parapet, fascia details	18
Replace roof access hatches	25
Specialist Roof Systems - Fall arrest	25
Waterproofing details to penthouse paved areas	12
Elevations	
Render replacement / repair	35- 50
Metal Panels - recoating	25
Minor repairs to render areas	18
Replace exit/entrance doors	25
Replace rainwater goods	25
Replace balcony floor finishes	25
External Areas/Car Parking	
External handrails and guarding	18
Surface finishes	18
Check drains for accumulation of debris and other sediments	6
Repaint parking spaces and numbering	7
Replace bike stands	25
Replace access control at entrances	12
M&E Services	
Internal re-lamping common areas	7
Replace internal light fittings	18
Replace external light fittings	18
Replace smoke detector heads	18
Replace manual break glass units	18
Replace fire alarm panel	18
Replace lift car and controls	25
Replace AOVs	25
Emergency lighting	20
External mains water connection	20

Key Data

AREA SCHEDULE, BESSBOROUGH MEADOWS, 280 APARTMENTS

KEY DEVOPLMENT AREAS	(SQ.M)	
SITE AREA (redline)	22,905.0	2.29ha
SITE DEVELOPABLE AREA	15,307.0	1.53ha
G.D.A.	32,698.7	
PLOT RATIO		2.14
SITE COVERAGE (INC.PODIUM)		48%
HEIGHT RANGE		1-10 STOREYS

EXISTING BUILDING	
EXISTING BUILDING TOTAL AREA (msq)	NIL
DEMOLITION AREA (msq)	NIL

GROSS DEVELOPMENT AREA (G.D.A.) (SQ.M)

LEVEL	BLOCK A	BLOCK B	BLOCK C	BLOCK D	NEW BUILT AREA
0	1,490.9	966.2	4,142.3	684.1	7,283.5
1	1,063.4	1,012.9	1,219.9	1,167.4	4,463.8
2	1,063.4	1,109.8	1,172.0	1,172.7	4,517.8
3	1,063.4	1,109.8	1,172.0	1,172.1	4,517.2
4	1,063.4	1,109.8	1,172.0	1,172.7	4,517.8
5	539.3	1,109.8	745.6	1,166.9	3,561.5
6		708.0	745.6	277.8	1,731.4
7		707.7	360.9		1,068.6
8		338.3	360.7		699.0
9		338.3			338.3
TOTAL	6,283.8	8,510.4	11,091.0	6,813.6	32,698.7

net lettable apartments area	19283.8

APARTMENT MIX

TYPE	NUMBER	%
STUDIO	6	2.1%
1 BED 2 PERSON	112	40.0%
2 BED 4 PERSON	150	53.6%
3 BED 5 PERSON	12	4.3%
TOTAL	280	100.0%

APARTMENT FLOOR AREAS NET ACTUAL (SQ.M)

BLOCK	AREA
BLOCK A	3,717.1
BLOCK B	5,854.2
BLOCK C	5,094.6
BLOCK D	4,617.9
TOTAL	19,283.8

APARTMENT DESIGN STANDARDS MIN. FLOOR AREA (SQ.M)

TYPE	%	NO	MIN. AREA REQUIRED (sqm)/APT	CUMULATIVE MIN. FLOOR AREA
STUDIO	2.1%	6	37	222.0
1 BED 2 PERSON	40.0%	112	45	5,040.0
2 BED 4 PERSON	53.6%	150	73	10,950.0
3 BED 5 PERSON	4.3%	12	90	1,080.0
	100%	280		17,292.0

REALLOCATION OF +10% OF MAJORITY

2 BED 4 PERSON

150 X 7.3 = 1,095.0 sqm

TOTAL REQUIRED MINIMUM FLOOR AREA

17,292.0 + 1,095.0 = *18,387.0* sqm

NOTE:

19,283.8 provided

we confirm that 162 apartments are 10% over minimum standards - see HQA

AREA SCHEDULE CONTINUED

ASPECT CONTENT			
ASPECT		NO	%
DUAL		121	43.2%
SOUTH		47	16.8%
EAST/WEST		73	26.1%
NORTH	over amenity/landscape	39	13.9%
TOTAL		**280**	**100.0%**

GROSS FLOOR SPACE (COMBINED)		AREA (sqm)	%
APARTMENTS		19,283.8	59.0%
CIRCULATION		1,171.3	3.6%
STAIR CORES		2,979.9	9.1%
PLANT		175.3	0.5%
REFUSE		186.4	0.6%
BIKE STORES		303.1	0.9%
GYM		190.9	0.6%
CAFÉ		89.1	0.3%
LOUNGES		433.5	1.3%
CRECHE		306.7	0.9%
SUBSTATION		26.3	0.1%
BALANCE*		4,385.5	13.4%
CAR PARK		3,147.0	9.6%
TOTAL	G.D.A.	**32,698.7**	**100%**

COMMUNAL AREAS (NET) (SQ.M)	
LOCATION	AREA
GYM	190.9
LOUNGE/WORKSHOP	295.9
LOUNGE 2	137.6
TOTAL	**624.4**

PARKING FACILITIES		
TYPE		NUMBER (ACTUAL)
RESIDENTS CAR PARK		98
DROP OFF		4
TOTAL	36 %	102

	NUMBER (ACTUAL)	NO.(REQ)
RESIDENTS BIKE STANDS	456	454
VISITORS BIKE STANDS	140	140
TOTAL	596	594
MOTORBIKE STANDS	10	

LANDSCAPE (SQ.M)	
LOCATION	AREA
PODIUM (NET)	1,616.0
CRECHE PLAYGROUND	315.0

RESIDENTIAL AMENITY AREA (SQ.M)			
TYPE	APART NO.	MIN. AMENITY AREA / APT	TOTAL PUBLIC AMENITY AREA REQUIRED (required)
STUDIO	6	4.0	24.0
1 BED 2 PERSON	112	5.0	560.0
2 BED 4 PERSON	150	7.0	1,050.0
3 BED 5 PERSON	12	9.0	108.0
	280		1,742.0

RESIDENTIAL AMENITY ACHIEVED	**2,119.0**
PUBLIC OPEN SPACE	**3,958.0**

DETAILED AREA BREAKDOWN

*Balance (all risers, shats , internal walls , extrenal walls)

LEVEL 0	APART. NO.	20						7,283.5
BUILDING A			BUILDING B			BUILDING C			BUILDING D		
Apartments net	6	254.8	Apartments net	8	534.0	Apartments net	3	202.0	Apartments net	3	198.7
Circulation net		17.8	Circulation net		40.4	Circulation net		23.0	Circulation net		10.6
Stair core net		120.4	Stair core net		99.4	Stair core net		212.6	Stair core net		85.5
Plant		29.6	Plant		23.0	Plant		95.2	Plant		27.5
Refuse		65.2	Refuse		35.1	Refuse		53.2	Refuse		32.9
Bikes		54.0	Cafe		89.1	Bikes		197.1	Bikes		52.0
Lounges/Workspace		433.5		net	821.1	Car park		3,147.0	Gym		190.9
Sub		20.0				Sub		26.2		net	598.1
Creche		306.7					net	3,956.3			
	net	1,302.0									
*Balance		188.9	*Balance		145.1	*Balance		186.0	*Balance		86.0
	Gross	1,490.9		Gross	966.2		Gross	4,142.3		Gross	684.1

LEVEL 1	APART. NO.	45						4,463.8
BUILDING A			BUILDING B			BUILDING C			BUILDING D		
Apartments net	11	771.1	Apartments net	10	687.2	Apartments net	12	849.6	Apartments net	12	849.6
Circulation net		40.5	Circulation net		40.4	Circulation net		53.7	Circulation net		52.5
Stair core net		98.8	Stair core net		83.9	Stair core net		138.9	Stair core net		98.1
	net	910.4		net	811.5		net	1,042.2		net	1,000.1
*Balance		153.0	*Balance		201.4	*Balance		177.7	*Balance		167.3
	Gross	1,063.4		Gross	1,012.9		Gross	1,219.9		Gross	1,167.4

LEVEL 2	APART. NO.	47						4,517.8
BUILDING A			BUILDING B			BUILDING C			BUILDING D		
Apartments net	11	771.1	Apartments net	12	802.7	Apartments net	12	849.6	Apartments net	12	853.4
Circulation net		40.5	Circulation net		43.0	Circulation net		53.7	Circulation net		52.5
Stair core net		98.8	Stair core net		94.2	Stair core net		101.4	Stair core net		98.1
	net	910.4		net	939.9		net	1,004.7		net	1,003.9
*Balance		153.0	*Balance		169.9	*Balance		167.3	*Balance		168.8
	Gross	1,063.4		Gross	1,109.8		Gross	1,172.0		Gross	1,172.7

DETAILED AREA BREAKDOWN

LEVEL 3	APART. NO.	47						4,517.2
BUILDING A			BUILDING B			BUILDING C		BUILDING D	
Apartments net	11	771.1	Apartments net	12	802.7	Apartments net	12 849.6	Apartments net	12 853.4
Circulation net		40.5	Circulation net		43.0	Circulation net	53.7	Circulation net	52.5
Stair core net		98.8	Stair core net		94.2	Stair core net	101.4	Stair core net	98.1
	net	910.4		net	939.9	net	1,004.7	net	1,003.9
* Balance		153.0	* Balance		169.9	* Balance	167.3	* Balance	168.2
	Gross	1,063.4		Gross	1,109.8	Gross	1,172.0	Gross	1,172.1

LEVEL 4	APART. NO.	47						4,517.8
BUILDING A			BUILDING B			BUILDING C		BUILDING D	
Apartments net	11	771.1	Apartments net	12	802.7	Apartments net	12 849.6	Apartments net	12 853.4
Circulation net		40.5	Circulation net		43.0	Circulation net	53.7	Circulation net	52.5
Stair core net		98.8	Stair core net		94.2	Stair core net	101.4	Stair core net	98.1
	net	910.4		net	939.9	net	1,004.7	net	1,003.9
* Balance		153.0	* Balance		169.9	* Balance	167.3	* Balance	168.8
	Gross	1,063.4		Gross	1,109.8	Gross	1,172.0	Gross	1,172.7

LEVEL 5	APART. NO.	36						3,561.5
BUILDING A			BUILDING B			BUILDING C		BUILDING D	
Apartments net	5	377.9	Apartments net	12	802.7	Apartments net	7 525.9	Apartments net	12 849.6
						Balconies net			
Circulation net		20.6	Circulation net		43.0	Circulation net	40.7	Circulation net	52.4
Stair core net		65.5	Stair core net		94.2	Stair core net	73.1	Stair core net	98.1
	net	464.0		net	939.9	net	639.7	net	1,000.1
* Balance		75.3	* Balance		169.9	* Balance	105.9	* Balance	166.8
	Gross	539.3		Gross	1,109.8	Gross	745.6	Gross	1,166.9

DETAILED AREA BREAKDOWN

LEVEL 6	APART. NO.	17						1,731.4
BUILDING B			BUILDING C			BUILDING D		
Apartments net	7	503.1	Apartments net	7	525.9	Apartments net	3	159.8
Circulation net		21.5	Circulation net		40.7	Circulation net		17.1
Stair core net		73.5	Stair core net		73.1	Stair core net		62.6
	net	598.1		net	639.7		net	239.5
*Balance		109.9	*Balance		105.9	*Balance		38.3
	Gross	708.0		Gross	745.6		Gross	277.8
LEVEL 7	APART. NO.	11						1,068.6
BUILDING B			BUILDING C					
Apartments net	7	503.1	Apartments net	4	221.2			
Circulation net		21.5	Circulation net		25.5			
Stair core net		73.5	Stair core net		60.4			
	net	598.1		net	307.1			
*Balance		109.6	*Balance		53.8			
	Gross	707.7		Gross	360.9			
LEVEL 8	APART. NO.	7						699.0
BUILDING B			BUILDING C					
Apartments net	3	208.0	Apartments net	4	221.2			
Circulation net		7.6	Circulation net		25.5			
Stair core net		64.2	Stair core net		62.5			
	net	279.8		net	309.2			
*Balance		58.5	*Balance		51.5			
	Gross	338.3		Gross	360.7			
LEVEL 9	APART. NO.	3						338.3
BUILDING B								
Apartments net	3	208.0						
Circulation net		7.6						
Stair core net		64.2						
	net	279.8						
*Balance		58.5						
	Gross	338.3						

TOTLA APART. NO. 280
TOTAL G.D.A. 32,698.7

Housing Quality Assessment

HOUSING QUALITY ASSESSMENT – BLOCK A

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
A	1	0	(S) 1P b	A.0.1	STUDIO APARTMENT	37	45.6	●		N	1	2	2850	N/A	N/A	30	37.4	3	3.4	4	8
A	2	0	(S) 1P b	A.0.2	STUDIO APARTMENT	37	45.6	●		N	1	2	2850	N/A	N/A	30	37.4	3	3.4	4	8
A	3	0	(S) 1P a	A.0.3	STUDIO APARTMENT	37	40.9	●	YES	N/S	1	2	2850	N/A	N/A	30	33.2	3	2.8	4	11.5
A	4	0	(S) 1P a	A.0.4	STUDIO APARTMENT	37	40.9	●	YES	N/S	1	2	2850	N/A	N/A	30	33.2	3	2.8	4	11.5
A	5	0	(S) 1P a	A.0.5	STUDIO APARTMENT	37	40.9	●	YES	N/S	1	2	2850	N/A	N/A	30	33.2	3	2.8	4	11.5
A	6	0	(S) 1P a	A.0.6	STUDIO APARTMENT	37	40.9	●	YES	N/S	1	2	2850	N/A	N/A	30	33.2	3	2.8	4	11.5
							254.8														62
A	7	1	2B4P f	A.1.7	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
A	8	1	2B4P e	A.1.8	2 BED APARTMENT	73	73.6		YES	N/E	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
A	9	1	2B4P e	A.1.9	2 BED APARTMENT	73	73.6		YES	N/W	2	4	2500	25.4	24.55	30	30.4	6	6.8	7	7
A	10	1	2B4P f	A.1.10	2 BED APARTMENT	73	74.7			W	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
A	11	1	1B2P h	A.1.11	1 BED APARTMENT	45	51.3	●		W	1	2	2500	11.4	12.1	23	29	3	3	5	9.5
A	12	1	2B4P n	A.1.12	2 BED APARTMENT	73	81.7	●	YES	S/W	2	4	2500	24.4	26.9	30	34.4	6	6.1	7	9.5
A	13	1	1B2P p	A.1.13	1 BED APARTMENT	45	62.1	●		S	1	2	2500	11.4	17.3	23	34.2	3	4	5	7
	14	1	1B2P d	A.1.14	1 BED APARTMENT	45	49.8	●		N	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
A	15	1	2B4P l	A.1.15	2 BED APARTMENT	73	79.7		YES	N/E	2	4	2500	24.4	26.3	30	31.7	6	7.5	7	7
A	16	1	2B4P g	A.1.16	2 BED APARTMENT	73	75.2		YES	S/E	2	4	2500	24.4	24.55	30	31.9	6	6	7	7
A	17	1	2B4P f	A.1.17	2 BED APARTMENT	73	74.7		YES	S/W	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
							771.1														83.5
A	18	2	2B4P f	A.2.18	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
A	19	2	2B4P e	A.2.19	2 BED APARTMENT	73	73.6		YES	N/E	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
A	20	2	2B4P e	A.2.20	2 BED APARTMENT	73	73.6		YES	N/W	2	4	2500	25.4	24.55	30	30.4	6	6.8	7	7
A	21	2	2B4P f	A.2.21	2 BED APARTMENT	73	74.7			W	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
A	22	2	1B2P h	A.2.22	1 BED APARTMENT	45	51.3	●		W	1	2	2500	11.4	12.1	23	29	3	3	5	9.5
A	23	2	2B4P n	A.2.23	2 BED APARTMENT	73	81.7	●	YES	S/W	2	4	2500	24.4	26.9	30	34.4	6	6.1	7	9.5
A	24	2	1B2P p	A.2.24	1 BED APARTMENT	45	62.1	●		S	1	2	2500	11.4	17.3	23	34.2	3	4	5	7
A	25	2	1B2P d	A.2.25	1 BED APARTMENT	45	49.8	●		N	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
A	26	2	2B4P l	A.2.26	2 BED APARTMENT	73	79.7		YES	N/E	2	4	2500	24.4	26.3	30	31.7	6	7.5	7	7
A	27	2	2B4P g	A.2.27	2 BED APARTMENT	73	75.2		YES	S/E	2	4	2500	24.4	24.55	30	31.9	6	6	7	7
A	28	2	2B4P f	A.2.28	2 BED APARTMENT	73	74.7		YES	S/W	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
							771.1														83.5
A	29	3	2B4P f	A.3.29	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
A	30	3	2B4P e	A.3.30	2 BED APARTMENT	73	73.6		YES	N/E	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
A	31	3	2B4P e	A.3.31	2 BED APARTMENT	73	73.6		YES	N/W	2	4	2500	25.4	24.55	30	30.4	6	6.8	7	7
A	32	3	2B4P f	A.3.32	2 BED APARTMENT	73	74.7			W	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
A	33	3	1B2P h	A.3.33	1 BED APARTMENT	45	51.3	●		W	1	2	2500	11.4	12.1	23	29	3	3	5	9.5
A	34	3	2B4P n	A.3.34	2 BED APARTMENT	73	81.7	●	YES	S/W	2	4	2500	24.4	26.9	30	34.4	6	6.1	7	9.5
A	35	3	1B2P p	A.3.35	1 BED APARTMENT	45	62.1	●		S	1	2	2500	11.4	17.3	23	34.2	3	4	5	7
A	36	3	1B2P d	A.3.36	1 BED APARTMENT	45	49.8	●		N	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
A	37	3	2B4P l	A.3.37	2 BED APARTMENT	73	79.7		YES	N/E	2	4	2500	24.4	26.3	30	31.7	6	7.5	7	7
A	38	3	2B4P g	A.3.38	2 BED APARTMENT	73	75.2		YES	S/E	2	4	2500	24.4	24.55	30	31.9	6	6	7	7
A	39	3	2B4P f	A.3.39	2 BED APARTMENT	73	74.7		YES	S/W	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
							771.1														83.5

HOUSING QUALITY ASSESSMENT - BLOCK A CONTINUED

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
A	40	4	2B4P f	A.4.40	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
A	41	4	2B4P e	A.4.41	2 BED APARTMENT	73	73.6		YES	N/E	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
A	42	4	2B4P e	A.4.42	2 BED APARTMENT	73	73.6		YES	N/W	2	4	2500	25.4	24.55	30	30.4	6	6.8	7	7
A	43	4	2B4P f	A.4.43	2 BED APARTMENT	73	74.7			W	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
A	44	4	1B2P h	A.4.44	1 BED APARTMENT	45	51.3	●		W	1	2	2500	11.4	12.1	23	29	3	3	5	9.5
A	45	4	2B4P n	A.4.45	2 BED APARTMENT	73	81.7	●	YES	S/W	2	4	2500	24.4	26.9	30	34.4	6	6.1	7	9.5
A	46	4	1B2P p	A.4.46	1 BED APARTMENT	45	62.1	●		S	1	2	2500	11.4	17.3	23	34.2	3	4	5	7
A	47	4	1B2P d	A.4.47	1 BED APARTMENT	45	49.8	●		N	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
A	48	4	2B4P l	A.4.48	2 BED APARTMENT	73	79.7		YES	N/E	2	4	2500	24.4	26.3	30	31.7	6	7.5	7	7
A	49	4	2B4P g	A.4.49	2 BED APARTMENT	73	75.2		YES	S/E	2	4	2500	24.4	24.55	30	31.9	6	6	7	7
A	50	4	2B4P f	A.4.50	2 BED APARTMENT	73	74.7		YES	S/W	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
							771.1														**83.5**
A	51	5	3B5P a	A.5.51	3 BED APARTMENT	90	101.3	●	YES	N/E	3	5	2500	31.5	41.4	34	34.2	9	9	9	9.4
A	52	5	2B4P o	A.5.52	2 BED APARTMENT	73	81.5	●	YES	N/W	2	4	2500	24.4	29	30	32	6	6.2	7	7
A	53	5	1B2P h	A.5.53	1 BED APARTMENT	45	51.3	●		W	1	2	2500	11.4	12.1	23	29	3	3	5	9.5
A	54	5	2B4P n	A.5.54	2 BED APARTMENT	73	81.7	●	YES	S/W	2	4	2500	24.4	26.9	30	34.4	6	6.1	7	9.5
A	55	5	1B2P p	A.5.55	1 BED APARTMENT	45	62.1	●	YES	S/E	1	2	2500	11.4	17.3	23	34.2	3	4	5	7
							377.9														**42.4**
TOTAL			55 apartments				3717.1	27	32		91	181									438.4

HOUSING QUALITY ASSESSMENT - BLOCK B

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
B	56	0	2B4P a	B.0.1	2 BED APARTMENT	73	74.3			S	2	4	2850	24.4	24.9	30	30.9	6	6	7	9.3
B	57	0	2B4P e	B.0.2	2 BED APARTMENT	73	73.5		YES	S/W	2	4	2850	24.4	24.55	30	30.4	6	6.8	7	7
B	58	0	2B4P c	B.0.3	2 BED APARTMENT	73	73.5		YES	N/W	2	4	2850	24.4	24.55	30	30.3	6	6.8	7	7
B	59	0	1B2P n	B.0.4	1 BED APARTMENT	45	57.1	●		N	1	2	2850	11.4	17.6	23	27.4	3	4.1	5	7.2
B	60	0	1B2P q	B.0.5	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2850	11.4	12.4	23	35.4	3	8.1	5	5.9
B	61	0	2B4P q	B.0.6	2 BED APARTMENT	73	90.1	●		E	2	4	2850	24.4	30.2	30	37.1	6	6	7	7
B	62	0	1B2P c	B.0.7	1 BED APARTMENT	45	49.7	●		E	1	2	2850	11.4	11.9	23	26.1	3	4	5	8.6
B	63	0	1B2P d	B.0.8	1 BED APARTMENT	45	49.8	●		W	1	2	2850	11.4	12.3	23	25.8	3	4	5	7
							534														**59**
B	64	1	2B4P a	B.1.9	2 BED APARTMENT	73	74.3			S	2	4	2500	24.4	24.9	30	30.9	6	6	7	9.3
B	65	1	2B4P e	B.1.10	2 BED APARTMENT	73	73.5		YES	S/W	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
B	66	1	2B4P c	B.1.11	2 BED APARTMENT	73	73.5		YES	N/W	2	4	2500	24.4	24.55	30	30.3	6	6.8	7	7
B	67	1	2B4P b	B.1.12	2 BED APARTMENT	73	73.8			N	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
B	68	1	1B2P k	B.1.13	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	69	1	1B2P q	B.1.14	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	70	1	2B4P q	B.1.15	2 BED APARTMENT	73	90.1	●		E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
B	71	1	1B2P e	B.1.16	1 BED APARTMENT	45	49.7	●		E	1	2	2500	11.4	11.9	23	26.2	3	4	5	8.6
B	72	1	1B2P s	B.1.17	1 BED APARTMENT	45	84.6	●	YES	E/W	1	2	2500	11.4	15.1	23	30.9	3	4.3	5	7
B	73	1	1B2P d	B.1.18	1 BED APARTMENT	45	49.8	●		W	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
							687.2														**72.8**

HOUSING QUALITY ASSESSMENT – BLOCK B CONTINUED

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
B	74	2	2B4P a	B.2.19	2 BED APARTMENT	73	74.3			S	2	4	2500	24.4	24.9	30	30.9	6	6	7	9.3
B	75	2	2B4P e	B.2.20	2 BED APARTMENT	73	73.5		YES	S/W	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
B	76	2	2B4P c	B.2.21	2 BED APARTMENT	73	73.5		YES	N/W	2	4	2500	24.4	24.55	30	30.3	6	6.8	7	7
B	77	2	2B4P b	B.2.22	2 BED APARTMENT	73	73.8			N	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
B	78	2	1B2P k	B.2.23	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	79	2	1B2P q	B.2.24	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	80	2	2B4P q	B.2.25	2 BED APARTMENT	73	90.1	●		E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
B	81	2	2B4P k	B.2.26	2 BED APARTMENT	73	77.7			E	2	4	2500	24.4	25.4	30	30	6	6.3	7	9
B	82	2	1B2P a	B.2.27	1 BED APARTMENT	45	45			E	1	2	2500	11.4	11.4	23	23	3	3.1	5	6.1
B	83	2	2B4P j	B.2.28	2 BED APARTMENT	73	75.4		YES	S/W	2	4	2500	24.4	24.9	30	30	6	6	7	9.2
B	84	2	1B2P l	B.2.29	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	13.7	23	25.4	3	3	5	5.9
B	85	2	1B2P d	B.2.30	1 BED APARTMENT	45	49.8	●		W	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
							802.7														87.4
B	86	3	2B4P a	B.3.31	2 BED APARTMENT	73	74.3			S	2	4	2500	24.4	24.9	30	30.9	6	6	7	9.3
B	87	3	2B4P e	B.3.32	2 BED APARTMENT	73	73.5		YES	S/W	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
B	88	3	2B4P c	B.3.33	2 BED APARTMENT	73	73.5		YES	N/W	2	4	2500	24.4	24.55	30	30.3	6	6.8	7	7
B	89	3	2B4P b	B.3.34	2 BED APARTMENT	73	73.8			N	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
B	90	3	1B2P k	B.3.35	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	91	3	1B2P q	B.3.36	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	92	3	2B4P q	B.3.37	2 BED APARTMENT	73	90.1	●		E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
B	93	3	2B4P k	B.3.38	2 BED APARTMENT	73	77.7			E	2	4	2500	24.4	25.4	30	30	6	6.3	7	9
B	94	3	1B2P a	B.3.39	1 BED APARTMENT	45	45			E	1	2	2500	11.4	11.4	23	23	3	3.1	5	6.1
B	95	3	2B4P j	B.3.40	2 BED APARTMENT	73	75.4		YES	S/W	2	4	2500	24.4	24.9	30	30	6	6	7	9.2
B	96	3	1B2P l	B.3.41	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	13.7	23	25.4	3	3	5	5.9
B	97	3	1B2P d	B.3.42	1 BED APARTMENT	45	49.8	●		W	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
							802.7														87.4
B	98	4	2B4P a	B.4.43	2 BED APARTMENT	73	74.3			S	2	4	2500	24.4	24.9	30	30.9	6	6	7	9.3
B	99	4	2B4P e	B.4.44	2 BED APARTMENT	73	73.5		YES	S/W	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
B	100	4	2B4P c	B.4.45	2 BED APARTMENT	73	73.5		YES	N/W	2	4	2500	24.4	24.55	30	30.3	6	6.8	7	7
B	101	4	2B4P b	B.4.46	2 BED APARTMENT	73	73.8			N	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
B	102	4	1B2P k	B.4.47	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	103	4	1B2P q	B.4.48	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	104	4	2B4P q	B.4.49	2 BED APARTMENT	73	90.1	●		E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
B	105	4	2B4P k	B.4.50	2 BED APARTMENT	73	77.7			E	2	4	2500	24.4	25.4	30	30	6	6.3	7	9
B	106	4	1B2P a	B.4.51	1 BED APARTMENT	45	45			E	1	2	2500	11.4	11.4	23	23	3	3.1	5	6.1
B	107	4	2B4P j	B.4.52	2 BED APARTMENT	73	75.4		YES	S/W	2	4	2500	24.4	24.9	30	30	6	6	7	9.2
B	108	4	1B2P l	B.4.53	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	13.7	23	25.4	3	3	5	5.9
B	109	4	1B2P d	B.4.54	1 BED APARTMENT	45	49.8	●		W	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
							802.7														87.4
B	110	5	2B4P a	B.5.55	2 BED APARTMENT	73	74.3			S	2	4	2500	24.4	24.9	30	30.9	6	6	7	9.3
B	111	5	2B4P e	B.5.56	2 BED APARTMENT	73	73.5		YES	S/W	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
B	112	5	2B4P c	B.5.57	2 BED APARTMENT	73	73.5		YES	N/W	2	4	2500	24.4	24.55	30	30.3	6	6.8	7	7
B	113	5	2B4P b	B.5.58	2 BED APARTMENT	73	73.8			N	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
B	114	5	1B2P k	B.5.59	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	115	5	1B2P q	B.5.60	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	116	5	2B4P q	B.5.61	2 BED APARTMENT	73	90.1	●		E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
B	117	5	2B4P k	B.5.62	2 BED APARTMENT	73	77.7			E	2	4	2500	24.4	25.4	30	30	6	6.3	7	9
B	118	5	1B2P a	B.5.63	1 BED APARTMENT	45	45			E	1	2	2500	11.4	11.4	23	23	3	3.1	5	6.1
B	119	5	2B4P j	B.5.64	2 BED APARTMENT	73	75.4		YES	S/W	2	4	2500	24.4	24.9	30	30	6	6	7	9.2
B	120	5	1B2P l	B.5.65	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	13.7	23	25.4	3	3	5	5.9
B	121	5	1B2P d	B.5.66	1 BED APARTMENT	45	49.8	●		W	1	2	2500	11.4	12.3	23	25.8	3	4	5	7
							802.7														87.4

HOUSING QUALITY ASSESSMENT – BLOCK B CONTINUED

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
B	122	6	2B4P a	B.6.67	2 BED APARTMENT	73	74.3			S	2	4	2500	24.4	24.9	30	30.9	6	6	7	9.3
B	123	6	2B4P e	B.6.68	2 BED APARTMENT	73	73.5		YES	S/W	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
B	124	6	2B4P c	B.6.69	2 BED APARTMENT	73	73.5		YES	N/W	2	4	2500	24.4	24.55	30	30.3	6	6.8	7	7
B	125	6	2B4P b	B.6.70	2 BED APARTMENT	73	73.8			N	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
B	126	6	1B2P k	B.6.71	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	127	6	1B2P q	B.6.72	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	128	6	2B4P q	B.6.73	2 BED APARTMENT	73	90.1	●	YES	S/E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
							503.1														50.2
B	129	7	2B4P a	B.7.74	2 BED APARTMENT	73	74.3			S	2	4	2500	24.4	24.9	30	30.9	6	6	7	9.3
B	130	7	2B4P e	B.7.75	2 BED APARTMENT	73	73.5		YES	S/W	2	4	2500	24.4	24.55	30	30.4	6	6.8	7	7
B	131	7	2B4P c	B.7.76	2 BED APARTMENT	73	73.5		YES	N/W	2	4	2500	24.4	24.55	30	30.3	6	6.8	7	7
B	132	7	2B4P b	B.7.77	2 BED APARTMENT	73	73.8			N	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
B	133	7	1B2P k	B.7.78	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	134	7	1B2P q	B.7.79	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	135	7	2B4P q	B.7.80	2 BED APARTMENT	73	90.1	●	YES	S/E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
							503.1														50.2
B	136	8	1B2P k	B.8.81	1 BED APARTMENT	45	51.9	●	YES	N/W	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	137	8	1B2P q	B.8.82	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	138	8	2B4P q	B.8.83	2 BED APARTMENT	73	90.1	●	YES	S/E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
							208														19.9
B	139	9	1B2P k	B.9.84	1 BED APARTMENT	45	51.9	●	YES	N/W	1	2	2500	11.4	13.7	23	24.7	3	3	5	7
B	140	9	1B2P q	B.9.85	1 BED APARTMENT	45	66	●	YES	N/E	1	2	2500	11.4	12.4	23	35.4	3	8.1	5	5.9
B	141	9	2B4P q	B.9.86	2 BED APARTMENT	73	90.1	●	YES	S/E	2	4	2500	24.4	30.2	30	37.1	6	6	7	7
				86 apartments			208														19.9
TOTAL							5854.2	43	37		135	270									621.6

HOUSING QUALITY ASSESSMENT – BLOCK C

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
C	142	0	2B4P f	C..0.1	2 BED APARTMENT	73	74.7			S	2	4	2850	24.4	25.2	30	30.1	6	6.1	7	7.5
C	143	0	1B2P m	C..0.2	1 BED APARTMENT	45	52.6	●		S	1	2	2850	11.4	11.7	23	28.9	3	3.2	5	5.9
C	144	0	2B4P d	C..0.3	2 BED APARTMENT	73	74.7			S	2	4	2850	24.4	24.4	30	30.5	6	6	7	7.5
							202														20.9
C	145	1	2B4P p	C.1.4	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
C	146	1	3B5P b	C.1.5	3 BED APARTMENT	90	111.5	●	YES	N/E	3	5	2500	31.5	42.7	34	40.7	9	9.25	9	14.4
C	147	1	2B4P f	C.1.6	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
C	148	1	1B2P i	C.1.7	1 BED APARTMENT	45	51.7	●		E	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
C	149	1	2B4P m	C.1.8	2 BED APARTMENT	73	81	●	YES	S/E	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
C	150	1	1B2P r	C.1.9	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7

HOUSING QUALITY ASSESSMENT – BLOCK C CONTINUED

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
C	151	1	2B4P f	C.1.10	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	18	23	40.7	3	3.2	5	7
C	152	1	1B2P m	C.1.11	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
C	153	1	2B4P b	C.1.12	2 BED APARTMENT	73	74.7		YES	S/W	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
C	154	1	2B4P i	C.1.13	2 BED APARTMENT	73	76.9		YES	N/W	2	4	2500	24.4	24.5	30	30.1	6	6.05	7	7
C	155	1	1B2P j	C.1.14	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
C	156	1	1B2P i	C.1.15	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							849.6														92.8
C	157	2	2B4P p	C.2.16	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
C	158	2	3B5P b	C.2.17	3 BED APARTMENT	90	111.5	●	YES	N/E	3	5	2500	31.5	42.7	34	40.7	9	9.25	9	14.4
C	159	2	2B4P f	C.2.18	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
C	160	2	1B2P i	C.2.19	1 BED APARTMENT	45	51.7	●		E	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
C	161	2	2B4P m	C.2.20	2 BED APARTMENT	73	81	●	YES	S/E	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
C	162	2	1B2P r	C.2.21	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7
C	163	2	2B4P f	C.2.22	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	18	23	40.7	3	3.2	5	7
C	164	2	1B2P m	C.2.23	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
C	165	2	2B4P b	C.2.24	2 BED APARTMENT	73	74.7		YES	S/W	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
C	166	2	2B4P i	C.2.25	2 BED APARTMENT	73	76.9		YES	N/W	2	4	2500	24.4	24.5	30	30.1	6	6.05	7	7
C	167	2	1B2P j	C.2.26	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
C	168	2	1B2P i	C.2.27	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							849.6														92.8
C	169	3	2B4P p	C.3.28	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
C	170	3	3B5P b	C.3.29	3 BED APARTMENT	90	111.5	●	YES	N/E	3	5	2500	31.5	42.7	34	40.7	9	9.25	9	14.4
C	171	3	2B4P f	C.3.30	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
C	172	3	1B2P i	C.3.31	1 BED APARTMENT	45	51.7	●		E	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
C	173	3	2B4P m	C.3.32	2 BED APARTMENT	73	81	●	YES	S/E	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
C	174	3	1B2P r	C.3.33	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7
C	175	3	2B4P f	C.3.34	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	18	23	40.7	3	3.2	5	7
C	176	3	1B2P m	C.3.35	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
C	177	3	2B4P b	C.3.36	2 BED APARTMENT	73	74.7		YES	S/W	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
C	178	3	2B4P i	C.3.37	2 BED APARTMENT	73	76.9		YES	N/W	2	4	2500	24.4	24.5	30	30.1	6	6.05	7	7
C	179	3	1B2P j	C.3.38	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
C	180	3	1B2P i	C.3.39	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							849.6														92.8
C	181	4	2B4P p	C.4.40	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
C	182	4	3B5P b	C.4.41	3 BED APARTMENT	90	111.5	●	YES	N/E	3	5	2500	31.5	42.7	34	40.7	9	9.25	9	14.4
C	183	4	2B4P f	C.4.42	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
C	184	4	1B2P i	C.4.43	1 BED APARTMENT	45	51.7	●		E	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
C	185	4	2B4P m	C.4.44	2 BED APARTMENT	73	81	●	YES	S/E	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
C	186	4	1B2P r	C.4.45	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7
C	187	4	2B4P f	C.4.46	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	18	23	40.7	3	3.2	5	7
C	188	4	1B2P m	C.4.47	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
C	189	4	2B4P b	C.4.48	2 BED APARTMENT	73	74.7		YES	S/W	2	4	2500	24.4	24.4	30	30	6	6.1	7	7
C	190	4	2B4P i	C.4.49	2 BED APARTMENT	73	76.9		YES	N/W	2	4	2500	24.4	24.5	30	30.1	6	6.05	7	7
C	191	4	1B2P j	C.4.50	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
C	192	4	1B2P i	C.4.51	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							849.6														92.8

HOUSING QUALITY ASSESSMENT – BLOCK C CONTINUED

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
C	193	5	2B4P p	C.5.52	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
C	194	5	3B5P b	C.5.53	3 BED APARTMENT	90	111.5	●	YES	N/E	3	5	2500	31.5	42.7	34	40.7	9	9.25	9	14.4
C	195	5	2B4P f	C.5.54	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
C	196	5	1B2P i	C.5.55	1 BED APARTMENT	45	51.7	●		E	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
C	197	5	2B4P m	C.5.56	2 BED APARTMENT	73	81	●	YES	S/E	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
C	198	5	1B2P j	C.5.57	1 BED APARTMENT	45	51.7	●		S	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
C	199	5	2B4P h	C.5.58	2 BED APARTMENT	73	73.1		YES	S/W	2	4	2500	24.4	24.4	30	30	6	6	7	7.1
							525.9														59
C	200	6	2B4P p	C.6.59	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
C	201	6	3B5P b	C.6.60	3 BED APARTMENT	90	111.5	●	YES	N/E	3	5	2500	31.5	42.7	34	40.7	9	9.25	9	14.4
C	202	6	2B4P f	C.6.61	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
C	203	6	1B2P i	C.6.62	1 BED APARTMENT	45	51.7	●		E	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
C	204	6	2B4P m	C.6.63	2 BED APARTMENT	73	81	●	YES	S/E	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
C	205	6	1B2P j	C.6.64	1 BED APARTMENT	45	51.7	●		S	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
C	206	6	2B4P h	C.6.65	2 BED APARTMENT	73	73.1		YES	S/W	2	4	2500	24.4	24.4	30	30	6	6	7	7.1
							525.9														59
C	207	7	1B2P b	C.7.66	1 BED APARTMENT	45	48.3		YES	N/E	1	2	2500	11.4	13.2	23	23.5	3	3	5	6.2
C	208	7	1B2P g	C.7.67	1 BED APARTMENT	45	49.6	●	YES	S/E	1	2	2500	11.4	11.6	23	25.5	3	3	5	6.3
C	209	7	1B2P f	C.7.68	1 BED APARTMENT	45	50.2	●		S	1	2	2500	11.4	12.1	23	30.5	3	3	5	5.7
C	210	7	2B4P h	C.7.69	2 BED APARTMENT	73	73.1		YES	S/W	2	4	2500	24.4	24.4	30	30	6	6	7	7.1
							221.2														25.3
C	211	8	1B2P b	C.8.70	1 BED APARTMENT	45	48.3		YES	N/E	1	2	2500	11.4	13.2	23	23.5	3	3	5	6.2
C	212	8	1B2P g	C.8.71	1 BED APARTMENT	45	49.6	●	YES	S/E	1	2	2500	11.4	11.6	23	25.5	3	3	5	6.3
C	213	8	1B2P f	C.8.72	1 BED APARTMENT	45	50.2	●		S	1	2	2500	11.4	12.1	23	30.5	3	3	5	5.7
C	214	8	2B4P h	C.8.73	2 BED APARTMENT	73	73.1		YES	S/W	2	4	2500	24.4	24.4	30	30	6	6	7	7.1
				73 apartments			221.2														25.3
TOTAL							5094.6	47	28		121	236									560.7

HOUSING QUALITY ASSESMENT – BLOCK D

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
D	215	0	1B2P i	D.0.1	1 BED APARTMENT	45	51.7	●		W	1	2	2850	11.4	12	23	28.5	3	3.1	5	7
D	216	0	2B4P m	D.0.2	2 BED APARTMENT	73	81	●	YES	S/W	2	4	2850	24.4	26.6	30	35.9	6	6.1	7	9
D	217	0	1B2P r	D.0.3	1 BED APARTMENT	45	66	●		S	1	2	2850	11.4	18	23	40.7	3	3.2	5	7
							198.7														23
D	218	1	2B4P f	D.1.4	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	219	1	3B5P b	D.1.5	3 BED APARTMENT	90	111.5	●	YES	N/E	3	5	2500	31.5	42.7	34	40.7	9	9.25	9	14.4
D	220	1	2B4P p	D.1.6	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
D	221	1	1B2P i	D.1.7	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
D	222	1	2B4P m	D.1.8	2 BED APARTMENT	73	81	●	YES	S/W	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9

HOUSING QUALITY ASSESSMENT – BLOCK D CONTINUED

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
D	223	1	1B2P r	D.1.9	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7
D	224	1	2B4P f	D.1.10	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	225	1	1B2P m	D.1.11	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
D	226	1	2B4P d	D.1.12	2 BED APARTMENT	73	74.7		YES	S/E	2	4	2500	24.4	24.4	30	30.5	6	6	7	7.5
D	227	1	2B4P r	D.1.13	2 BED APARTMENT	73	76.9		YES	N/E	2	4	2500	24.4	24.5	30	30.6	6	6.05	7	9
D	228	1	1B2P j	D.1.14	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
D	229	1	1B2P i	D.1.15	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							849.6														95.8
D	230	2	2B4P f	D.2.16	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	231	2	3B5P c	D.2.17	3 BED APARTMENT	90	115.3	●	YES	N/E	3	5	2500	31.5	46	34	40.7	9	9.25	9	14.7
D	232	2	2B4P p	D.2.18	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
D	233	2	1B2P i	D.2.19	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
D	234	2	2B4P m	D.2.20	2 BED APARTMENT	73	81	●	YES	S/W	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
D	235	2	1B2P r	D.2.21	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7
D	236	2	2B4P f	D.2.22	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	237	2	1B2P m	D.2.23	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
D	238	2	2B4P d	D.2.24	2 BED APARTMENT	73	74.7		YES	S/E	2	4	2500	24.4	24.4	30	30.5	6	6	7	7.5
D	239	2	2B4P r	D.2.25	2 BED APARTMENT	73	76.9		YES	N/E	2	4	2500	24.4	24.5	30	30.6	6	6.05	7	9
D	240	2	1B2P j	D.2.26	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
D	241	2	1B2P i	D.2.27	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							853.4														96.1
D	242	3	2B4P f	D.3.28	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	243	3	3B5P c	D.3.29	3 BED APARTMENT	90	115.3	●	YES	N/E	3	5	2500	31.5	46	34	40.7	9	9.25	9	14.7
D	244	3	2B4P p	D.3.30	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
D	245	3	1B2P i	D.3.31	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
D	246	3	2B4P m	D.3.32	2 BED APARTMENT	73	81	●	YES	S/W	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
D	247	3	1B2P r	D.3.33	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7
D	248	3	2B4P f	D.3.34	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	249	3	1B2P m	D.3.35	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
D	250	3	2B4P d	D.3.36	2 BED APARTMENT	73	74.7		YES	S/E	2	4	2500	24.4	24.4	30	30.5	6	6	7	7.5
D	251	3	2B4P r	D.3.37	2 BED APARTMENT	73	76.9		YES	N/E	2	4	2500	24.4	24.5	30	30.6	6	6.05	7	9
D	252	3	1B2P j	D.3.38	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
D	253	3	1B2P i	D.3.39	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							853.4														96.1
D	254	4	2B4P f	D.4.40	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	255	4	3B5P c	D.4.41	3 BED APARTMENT	90	115.3	●	YES	N/E	3	5	2500	31.5	46	34	40.7	9	9.25	9	14.7
D	256	4	2B4P p	D.4.42	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
D	257	4	1B2P i	D.4.43	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
D	258	4	2B4P m	D.4.44	2 BED APARTMENT	73	81	●	YES	S/W	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
D	259	4	1B2P r	D.4.45	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7
D	260	4	2B4P f	D.4.46	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	261	4	1B2P m	D.4.47	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
D	262	4	2B4P d	D.4.48	2 BED APARTMENT	73	74.7		YES	S/E	2	4	2500	24.4	24.4	30	30.5	6	6	7	7.5
D	263	4	2B4P r	D.4.49	2 BED APARTMENT	73	76.9		YES	N/E	2	4	2500	24.4	24.5	30	30.6	6	6.05	7	9
D	264	4	1B2P j	D.4.50	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
D	265	4	1B2P i	D.4.51	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							853.4														96.1

HOUSING QUALITY ASSESSMENT – BLOCK D CONTINUED

BUILDING	UNIT NUMBER	FLOOR LEVEL	APARTMENT TYPE	UNIT REFERENCE	UNIT DESCRIPTION	UNIT AREA REQUIRED (m2)	UNIT AREA ACHIEVED (m2)	10% or over minimum area	DUAL ASPECT	ASPECT	BEDROOMS	BEDSPACES	CEILING HEIGHT	AGGREGATE BEDROOM AREAS REQUIRED (m2)	AGGREGATE BEDROOM AREA ACHIEVED (m2)	KITCHEN/ LIVING/ DINING AREA REQUIRED (m2)	KITCHEN/ LIVING/ DINING AREA ACHIEVED (m2)	AGGREGATE STORAGE AREA REQUIRED (m2)	AGGREGATE STORAGE AREA ACHIEVED (m2)	PRIVATE AMENITY (BALCONY) SPACE REQUIRED (m2)	PRIVATE AMENITY (BALCONY) SPACE ACHIEVED (m2)
D	266	5	2B4P f	D.5.52	2 BED APARTMENT	73	74.7			E	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	267	5	3B5P b	D.5.53	3 BED APARTMENT	90	111.5	●	YES	N/E	3	5	2500	31.5	42.7	34	40.7	9	9.25	9	14.4
D	268	5	2B4P p	D.5.54	2 BED APARTMENT	73	82.2	●		W	2	4	2500	24.4	26.7	30	31.5	6	6.2	7	7
D	269	5	1B2P i	D.5.55	1 BED APARTMENT	45	51.7	●		W	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
D	270	5	2B4P m	D.5.56	2 BED APARTMENT	73	81	●	YES	S/W	2	4	2500	24.4	26.6	30	35.9	6	6.1	7	9
D	271	5	1B2P r	D.5.57	1 BED APARTMENT	45	66	●		S	1	2	2500	11.4	18	23	40.7	3	3.2	5	7
D	272	5	2B4P f	D.5.58	2 BED APARTMENT	73	74.7			S	2	4	2500	24.4	25.2	30	30.1	6	6.1	7	7.5
D	273	5	1B2P m	D.5.59	1 BED APARTMENT	45	52.6	●		S	1	2	2500	11.4	11.7	23	28.9	3	3.2	5	5.9
D	274	5	2B4P d	D.5.60	2 BED APARTMENT	73	74.7		YES	S/E	2	4	2500	24.4	24.4	30	30.5	6	6	7	7.5
D	275	5	2B4P r	D.5.61	2 BED APARTMENT	73	76.9		YES	N/E	2	4	2500	24.4	24.5	30	30.6	6	6.05	7	9
D	276	5	1B2P j	D.5.62	1 BED APARTMENT	45	51.9	●		N	1	2	2500	11.4	12.3	23	27.9	3	4	5	7
D	277	5	1B2P i	D.5.63	1 BED APARTMENT	45	51.7	●		N	1	2	2500	11.4	12	23	28.5	3	3.1	5	7
							849.6														95.8
D	278	6	1B2P o	D.6.64	1 BED APARTMENT	45	60.2	●	YES	N/W	1	2	2500	11.4	12.1	23	38	3	3.3	5	5.9
D	279	6	1B2P l	D.6.65	1 BED APARTMENT	45	51.3	●	YES	S/W	1	2	2500	11.4	13.7	23	25.4	3	3	5	5.9
D	280	6	1B2P b	D.6.66	1 BED APARTMENT	45	48.3		YES	S/E	1	2	2500	11.4	13.2	23	23.5	3	3	5	6.2
				66 apartments			159.8														18
TOTAL							4617.9	45	24		107	209									520.9

APPENDIX

APPENDIX I - ROAD SAFTEY RESPONSE

Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted
2.1.1	Yes	Yes	To be completed to all areas in accordance with current standards and regulations applicable at detail design phase prior to implementation
2.1.2	No	Yes	Detailed public lighting plan designed by DKP per documentation issued -please refer to : PHASE 1 - THE MEADOWS *DKP-M88-6600 ¦ 2P# Bessborough - Phase 1 - External lighting report* *DKP-M88-6601 ¦ 2P# Bessborough - Phase 1 - Appendix A - Illumination calculation report* *DKP-M88-6602 ¦ 2P# Bessborough - Phase 1 - Appendix B - Illumination calculation report* PHASE 2 - THE FARM *DKP-M88-6600 ¦ 1P# Bessborough - Phase 2 - External lighting report* *DKP-M88-6601 ¦ 1P# Bessborough - Phase 2 - Appendix A - Illumination calculation report* *DKP-M88-6602 ¦ 1P# Bessborough - Phase 2 - Appendix B - Illumination calculation report*
2.1.3	Yes	Yes	To be completed to all areas in accordance with current standards and regulations applicable at detail design phase prior to implementation
2.1.4	No	Yes	Full drainage proposals submitted as part of application per documentation submitted JB Barry Consulting Engineers -ref: THE MEADOWS - PHASE 1 *21207-JBB-PH1-XX-DR-C-04001_Proposed_Drainage_Layout* THE FARM PHASE – PHASE 2 *21207-JBB-PH2-XX-DR-C-04002_Proposed_Drainage_Layout*
2.1.5	Yes	No	The locations mentioned for improvement are in third party private ownership and beyond the control of the applicant

Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting recommended measure. Only complete if recommended measure is not accepted
2.2.1	Yes	Yes	New pedestrian crossing added to location to meet desire lines please refer drawing number: SB-2020-106-200-MEADOWS SITE LAYOUT PLAN
2.2.2	Yes	Yes	The turning radius has been adjusted per recommendation. please refer drawing number: SB-2020-106-200-MEADOWS SITE LAYOUT PLAN
2.2.3	Yes	Yes	The arrangement has been revised to allow for clearer through traffic form the East with provision of save turning for creche drop off . please refer drawing number: *SB-2020-106-200-MEADOWS SITE LAYOUT PLAN*
2.2.4	Yes	Yes	A raised table Crossing are is provided for pedestrian priority. .Paving demarcation will be provided at detailed design phase for the area please refer drawing number: *SB-2020-106-200-MEADOWS SITE LAYOUT PLAN*
2.2.5	Yes	Yes	rail length to bridge has been shorten to provide safer sightlines before approaching crossing from East . limited low limb tree trimming and scrub vegetation removals are proposed in this are please refer drawing number: *SB-2020-106-200-MEADOWS SITE LAYOUT PLAN*
2.2.6	No	No	Crossing provision revised to meet a hard standing path on East side . The primary Desire line is to the North with new pedestrian crossing proposed at this location. please refer drawing number: *SB-2020-106-200-MEADOWS SITE LAYOUT PLAN*

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