

STRATEGIC HOUSING DEVELOPMENT

ST. JOSEPH'S HOUSE AND ADJOINING PROPERTIES BREWERY ROAD AND LEOPARDSTOWN ROAD DUBLIN 18

Masterplanning + Architectural Design Statement
24th September 2021



Fig 1. View from new entrance on Leopardstown Road

SHD APPLICATION

CONTENTS:

1.00 SITE CONTEXT ANALYSIS

2.00 MASTERPLAN STRATEGY

- 2.1 DESIGN PRINCIPLES
- 2.2 TREE SURVEY
- 2.3 ALTERNATIVES + EVOLUTION
- 2.4 HEIGHT STRATEGY
- 2.5 OVERVIEW
- 2.6 SITE SECTIONS

3.00 DESIGN PROPOSAL

- 3.1 SITE PLAN
- 3.2 OPEN SPACE STRATEGY
- 3.3 GREEN ROOF STRATEGY
- 3.4 SEPARATION DISTANCES
- 3.5 UNIT TYPES
- 3.6 DESIGN IMPROVEMENTS
- 3.7 CGI'S VIEWS
- 3.8 CONTEXTUAL ELEVATIONS
- 3.9 ST JOSEPH'S HOUSE

4.00 MATERIAL STUDIES

- 4.1 MATERIALITY

5.00 APPENDIX

APPENDIX A:

PART 5 AND SCHEDULE

APPENDIX B:

SOA AND DEVELOPMENT SCHEDULE

APPENDIX C:

DUAL ASPECT DIAGRAMS & SCHEDULE
NORTH FACING DIAGRAMS & SCHEDULE

APPENDIX D

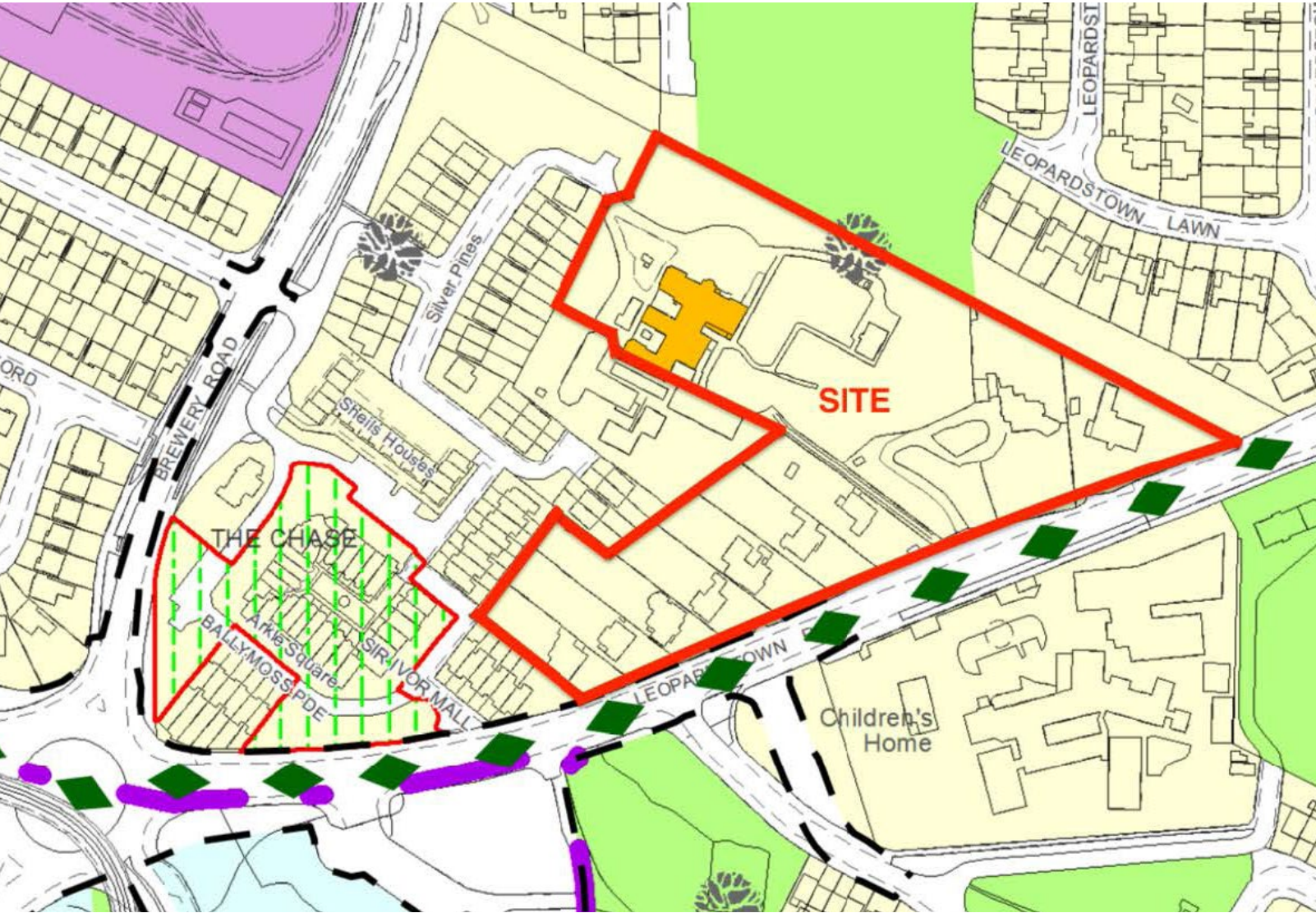
DRAWING REGISTER & HQA SCHEDULE

APPENDIX E

RESPONSE TO ABP OPINION REPORT

1.00 SITE CONTEXT ANALYSIS

STATUTORY FRAMEWORK



The Dun Laoghaire Rathdown County Development Plan 2016-2022 is the relevant statutory planning context for the subject site. In addition, we note that the Sustainable Urban Housing: Design Standards for New Apartments (2020) also provide for guidance on Apartment Development, which will be considered as part of any proposal that progresses.

The subject site is zoned 'A' - "To Protect and/or improve residential amenity". Uses permitted in principle under this zoning include:

"Assisted Living Accommodation, Open Space, Public Services, Residential Institution, Travellers Accommodation."

The subject site also contains a Protected Structure, namely St. Joseph's House (RPS No. 1548).

There is also an objective on the site "To protect and preserve Trees and Woodlands" also there is an objective to provide Proposed Quality Bus and Bus Priority routes (green diamonds indicated on the map) along the eastern site boundary.

This site is proximate to an Architectural Conservation Area identified as "The Chase".

* Refer to drawings for the formal red line site boundary the image shown relates to the main development site area.

01. SITE CONTEXT ANALYSIS

LOCAL AMENITIES

The residential development is provided:

The site consists of (1) 'Saint Joseph's House', Brewery Road, Stillorgan, Co. Dublin (A94 Y7F4); (2) 'Madona House', Silverpines, Stillorgan, Blackrock, Co. Dublin (A94 Y230); and (3) Properties at 'Woodleigh' (D18 F3F4), 'Cloonagh' (D18 P5P9), 'Souk El Raab' (D18 Y6C5), 'Wellbrook' (D18 H0C6), 'Calador' (D18 W1Y2), 'Alhambra' (D18 E3C4), 'Dalwhinnie' (D18 P2P4), 'Annaghkeen' (D18 Y2W1) and 'The Crossing' (D18 W8 W2); all located at Leopardstown Road, Dublin 18.

The development will consist of a new residential and mixed use scheme to include apartments, residential amenity space, a café and a childcare facility. A detailed description is now set out as follows:

The proposal provides for the demolition of 10 no. properties and associated outbuildings at 'Madona House' (single storey), 'Woodleigh' (2 storeys), 'Cloonagh' (2 storeys), 'Souk El Raab' (2 storeys), 'Wellbrook' (2 storeys), 'Calador' (2 storeys), 'Alhambra' (2 storeys), 'Dalwhinnie' (2 storeys), 'Annaghkeen' (1-2 storeys) and 'The Crossing' (single storey) (combined demolition approx. 2,291.3 sq m GFA).

The new development will provide for (a) the refurbishment, internal separation and material change of use of Saint Joseph's House (a Protected Structure, RPS No. 1548) from former residential care facility to residential use and a childcare facility; and (b) the construction of a new build element to provide for an overall total of 463 no. residential units, residential amenity space and a café.

The overall development proposal shall provide for the following:

- Block A (5 storeys) comprising 49 no. apartments (13 no. 1 bed units, 33 no. 2 bed units and 3 no. 3 bed units);
- Block B (4 - 7 storeys) comprising 88 no. apartments (28 no. 1 bed units, 57 no. 2 bed units and 3 no. 3 bed units);
- Block C (5 - 7 storeys) comprising 115 no. apartments (26 no. studio units, 26 no. 1 bed units and 57 no. 2 bed units and 6 no. 3 bed units);
- Block D (5 - 10 storeys) comprising 157 no. apartments (36 no. studio unit, 40 no. 1 bed units and 81 no. 2 bed units), residential amenity areas of approx. 636 sq m and a café of approx. 49 sq m;
- Block E (Saint Joseph's House) (2 storeys) comprising 9 no. apartments (8 no. 2 bed units and 1 no. 3 bed units) and a childcare facility of 282 sq m with associated outdoor play areas of approx. 130 sq m;
- Block F (3 - 6 storeys) comprising 45 no. apartments (23 no. studio units, 10 no. 1 bed units; and 12 no. 2 bed units);
- 259 car parking spaces (235 at basement level and 26 at ground level)
- 968 bicycle parking spaces (760 at basement level and 83 at ground level)



01. SITE CONTEXT ANALYSIS

LOCAL AMENITIES

- 1 Stillorgane LUAS Station
- 2 Sandyford LUAS Station
- 3 Central Park LUAS Station
- 4 Glencairn LUAS Station
- 5 Sandyford LUAS Depot
- 6 St Raphaelas Secondary School
- 7 Sandford Business Park
- 8 Central Park
- 9 Leopardstown Park Hospital
- 10 Leopardstown Tennis Club
- 11 Leopardstown Racecourse
- 12 Leopardstown Golf Centre
- 13 Foxrock Golf Club
- 14 Setanta Special School
- 15 The Liturgical Centre
- Stillorgan Road - Quality Bus Corridor
- M50



* Refer to drawings for the formal red line site boundary
the image shown relates to the main development site

01. SITE CONTEXT ANALYSIS

CONTEXT HEIGHT DIAGRAM

It is worth noting that within the context of the subject site there are a number of buildings that vary in height from 4-7storey and 8-12 storey.

To the south and south west of the subject site to note a series of commercial and apartment buildings that rise from 6 to 12 storeys, for example the headquarters for Vodafone Ireland (7 storey), Clayton Hotel (8 Storey) and Bank Of America(7storey), also Microsoft Ireland (6storey) and Central Park Apartment Complex (8-12 storeys).

Also to the north of the subject site, an example would be the Grange Apartments (7-10Storey) and to the west, South Central Apartments (8-10 storey)

The proposal will be 2 - 10 storeys in height overall, which is considered appropriate and in line with the requirements of "Urban Development and Building Heights" December 2018.

The design of the scheme has ensured that there is appropriate scale and massing alongside adjacent residential development while also maximising the use of this land.

- 1-3 Storey
- 4-7 Storey
- 8-12 Storey



01. SITE CONTEXT ANALYSIS

GREEN SPACES

There is an array of greenway networks, public and community open spaces that run north, south, east and west of the site.

Consideration has been given to permeability within the surrounding context and the protection of existing levels of residential amenities.

The proposal will provide for a key connection to the adjoining green network to the north, specifically to Leopardstown park and playing pitch via new pedestrian links that will connect Leopardstown Road to the green network via a new path through the site.

- 1 LEOPARDSTOWN HEIGHTS PLAYGROUND
- 2 TUDOR LAWNS
- 3 SILVERPARK GAA GROUND
- 4 LEOPARDSTOWN PARK 2
- 5 LEOPARDSTOWN PARK
- 6 WOODFORD ESTATE
- 7 CLONMORE PARK & PLAYGROUND
- 8 LEOPARDSTOWN PARK 1
- 9 WESTMINSTER LAWNS
- 10 BELMONT LAWN
- ... GREENWAY
- ★ PLAYGROUND
- ▲ EXERCISE EQUIPMENT ALL AGES



* Refer to drawings for the formal red line site boundary the image shown relates to the main development site

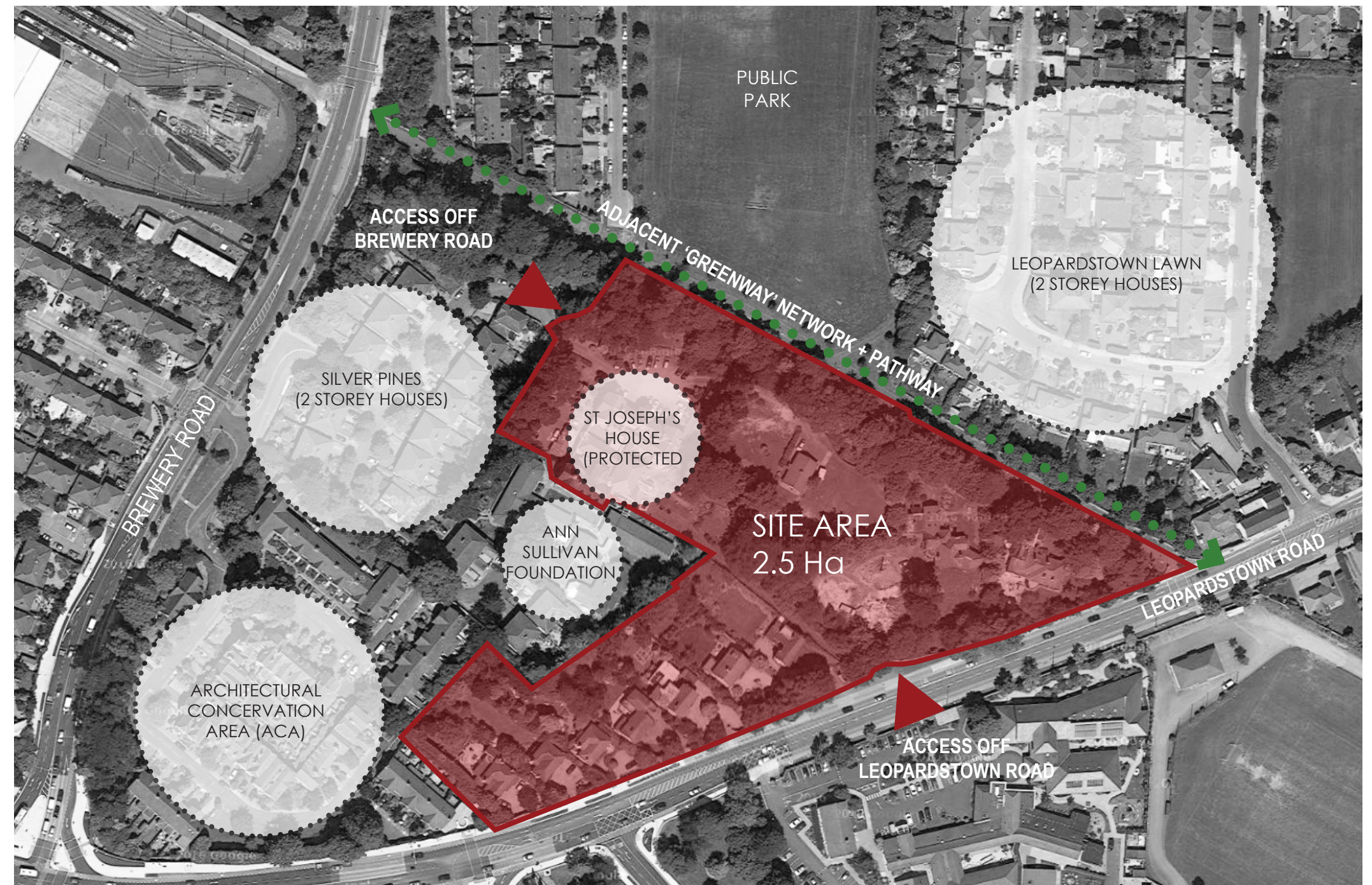
1.00 SITE CONTEXT ANALYSIS

SURROUNDING CONTEXT

The site comprises an area of c.2.58ha approximately and borders to the east with Leopardstown Lawn residential development, to the west with residential development known as 'The Chase' with Arkle Square (ACA), Silverpines Development and the lands of Ann Sullivan Foundation

The ACA identifies the Arkle Square of Architectural Significance, the complex represents a fine example of a nineteenth century architectural style.

The current scheme responds with sensitivity to the existing built fabric of the surrounding area including the ACA to the west. The design approach has been to maximise the use of the site around a central open space with pedestrian/cycle shared path that connects the surrounding green network enhancements to the public realm.



* Refer to drawings for the formal red line site boundary the image shown relates to the main development site

1.00 SITE CONTEXT ANALYSIS

SITE PHOTOS - VIEWS ALONG LEOPARDSTOWN ROAD

The images shown in this page, indicate clearly the south edge of the subject site's existing roadside and streetscape condition along Leopardstown Road.

The site is bound by a high defensive stone wall, which is punctuated by numerous private access/ entrance driveway points creating oppressive public realm edge with no passive surveillance or active frontage.



1 View towards Sandyford Industrial Area at Boundary



2 View towards Sandyford Industrial Area



3 View of Current Site Boundary onto Leopardstown Road



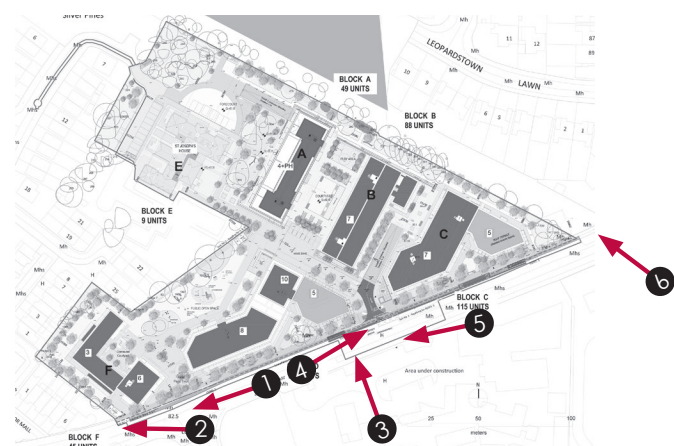
4 View towards Leopardstown at Site Boundary



5 View towards Leopardstown from opposite footpath



6 View of Greenway to North of Site



1.00 SITE CONTEXT ANALYSIS

PREVIOUSLY GRANTED PERMISSION

APPROVED PERMISSION (REG REF NO. : D17A/0337)
(ABP REF NO. : PL06D.249248)

In 2018, planning permission was granted for a development on a portion of the current site under consideration. (see images)

Under this permission, 131 residential units were permitted (126 apartments and 5 Town houses).

The extent of the site layout for this permission is shown with a thin red line. (see Site plan page 11)

In summary :

- Block A - as permitted delivered 49 residential units - 5 Storey
- Block B as permitted delivered 58 residential units - 5 Storey
- Block C as permitted delivered 11 residential units - 3 Storey
- Block D as permitted delivered 5 town house units - 2/3 Storey
- St. Joseph's House delivered 8 residential units, - 2 Storey
- Crèche facility of 268 sq m and residential tenant amenity facility or clubhouse of 112 sq m.



1.00 SITE CONTEXT ANALYSIS

EXPANSION OF LAND HOLDING

APPROVED PERMISSION (REG REF NO.: D17A/0337)
(ABP REF NO.: PL06D.249248)



The current subject site has been expanded (note thick red line to the Site Plan) through the amalgamation of a number of sites that the client has acquired in order to provide one cohesive land parcel.

The current subject site includes 'Annaghkeen', Dalwhinnie', 'Marian Villa', 'Alhambra', 'Souk El Raab', 'Calador', 'Cloonagh', 'The Crossing', Wellbrook' and 'Woodleigh' along Leopardstown Road, Dublin 18 and 'St. Joseph's House for the Adult Deaf and Deaf Blind', Brewery Road, Stillorgan, Co. Dublin.

Note that the refurbishment of St Josephs House, with adjacent Block A and part of the basement parking and has been retained as per the approved permission, in order to preserve the setting of the listed building within the expanded application.



- APARTMENT BUILDINGS
118 no. apartments units
- HOUSE TYPE 1 & 2
3/4 bed houses (5 no.)
- ST JOSEPH'S HOUSE
2/3 bed apartments (8 no.)
- CRECHE FACILITY
(268 s.m.)
- RESIDENT'S CLUBHOUSE
(112 s.m.)

Residential units total no.: 131 units

APPROVED PERMISSION
(REG REF NO.: D17A/0337)
(ABP REF NO.: PL06D.249248)

NEW COMBINED SITE AREA: 2.588 Ha.
& APPLICATION BOUNDARY IN RED

EXISTING DETACHED DWELLINGS TO
BE REMOVED
(7 No. ALONG LEOPARDSTOWN ROAD)

* Refer to drawings for the formal red line site boundary
the image shown relates to the main development site

SHD APPLICATION

CONTENTS:

1.00 SITE CONTEXT ANALYSIS

2.00 MASTERPLAN STRATEGY

- 2.1 DESIGN PRINCIPLES
- 2.2 TREE SURVEY
- 2.3 ALTERNATIVES + EVOLUTION
- 2.4 HEIGHT STRATEGY
- 2.5 OVERVIEW
- 2.6 SITE SECTIONS

3.00 DESIGN PROPOSAL

- 3.1 SITE PLAN
- 3.2 OPEN SPACE STRATEGY
- 3.3 GREEN ROOF STRATEGY
- 3.4 SEPARATION DISTANCES
- 3.5 UNIT TYPES
- 3.6 DESIGN IMPROVEMENTS
- 3.7 CGI'S VIEWS
- 3.8 CONTEXTUAL ELEVATIONS
- 3.9 ST JOSEPH'S HOUSE

4.00 MATERIAL STUDIES

- 4.1 MATERIALITY

5.00 APPENDIX

APPENDIX A:

PART 5 AND SCHEDULE

APPENDIX B:

SOA AND DEVELOPMENT SCHEDULE

APPENDIX C:

DUAL ASPECT DIAGRAMS & SCHEDULE
NORTH FACING DIAGRAMS & SCHEDULE

APPENDIX D

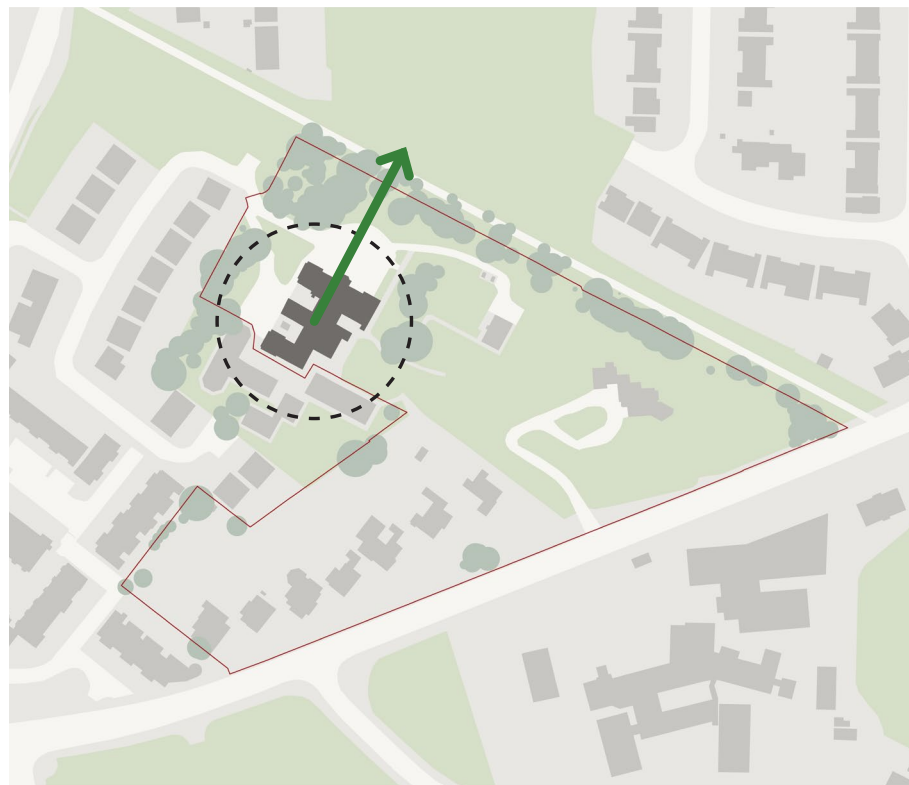
DRAWING REGISTER & HQA SCHEDULE

APPENDIX E

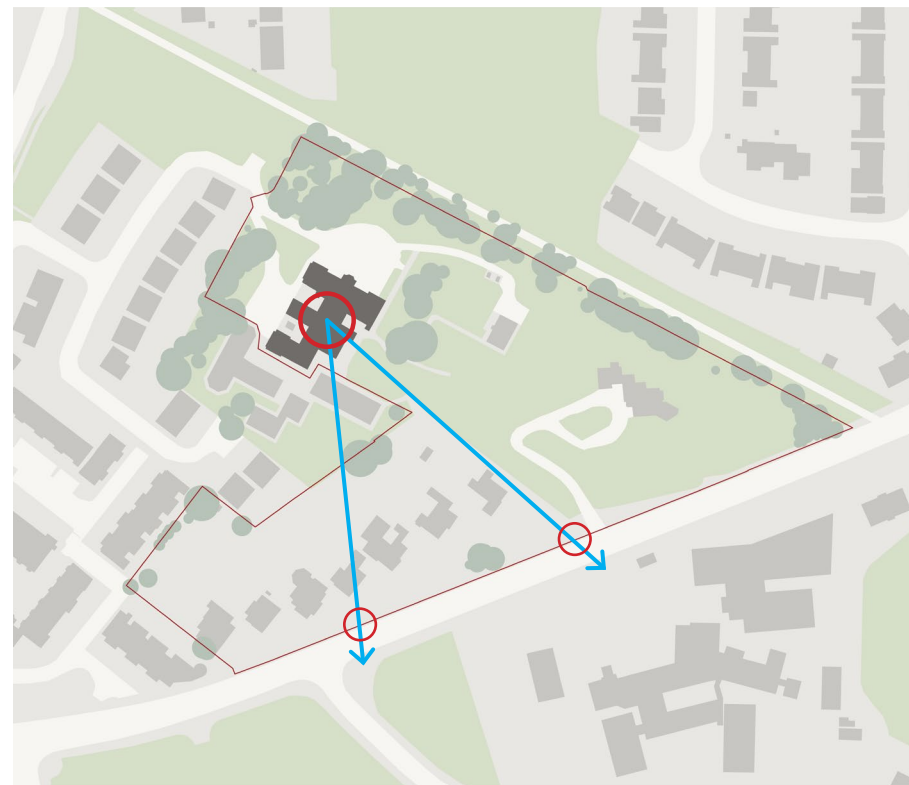
RESPONSE TO ABP + DLRCC OPINION REPORT

2.00 MASTERPLAN STRATEGY

2.1 DESIGN PRINCIPLES



1 St Joseph's - Reinststate as object building in the landscape



2 St Joseph's - Focal Point + Triangulation



3 Greenways Network



4 Existing Trees Inform Open Space



5 Urban Structure Consistency + Legibility



6 Primary + Secondary Elements

2.00 MASTERPLAN STRATEGY

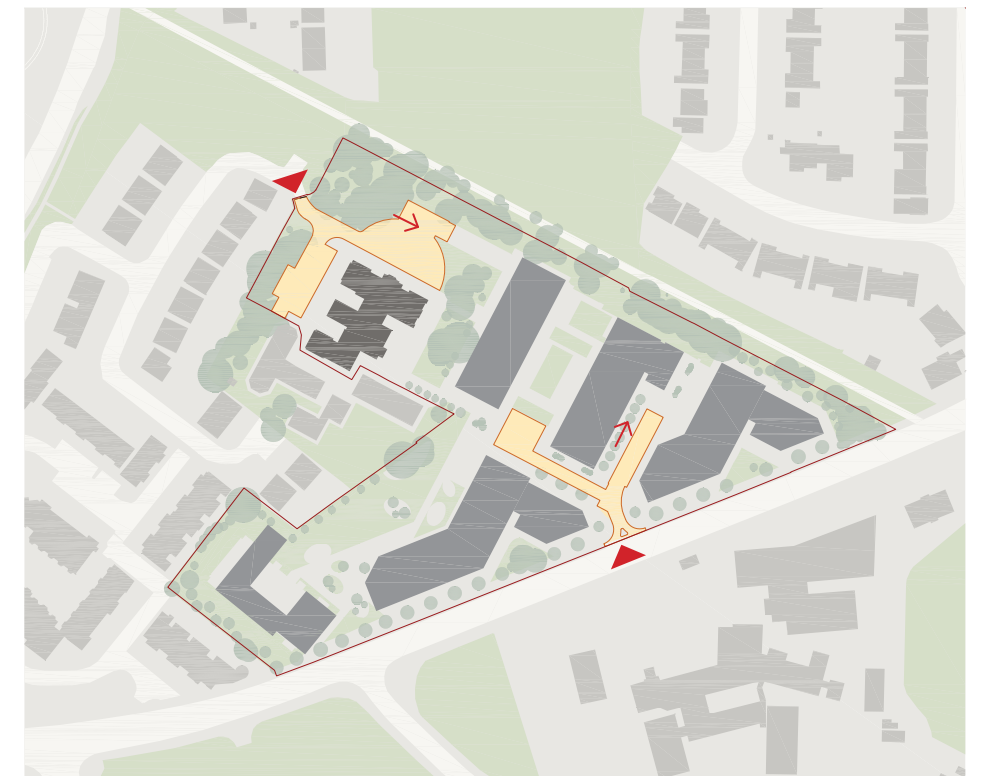
2.1 DESIGN PRINCIPLES



7 Public Open Space



8 Streetscape - Building Array + Pocket Gardens



9 Vehicular Access



10 Development Phasing



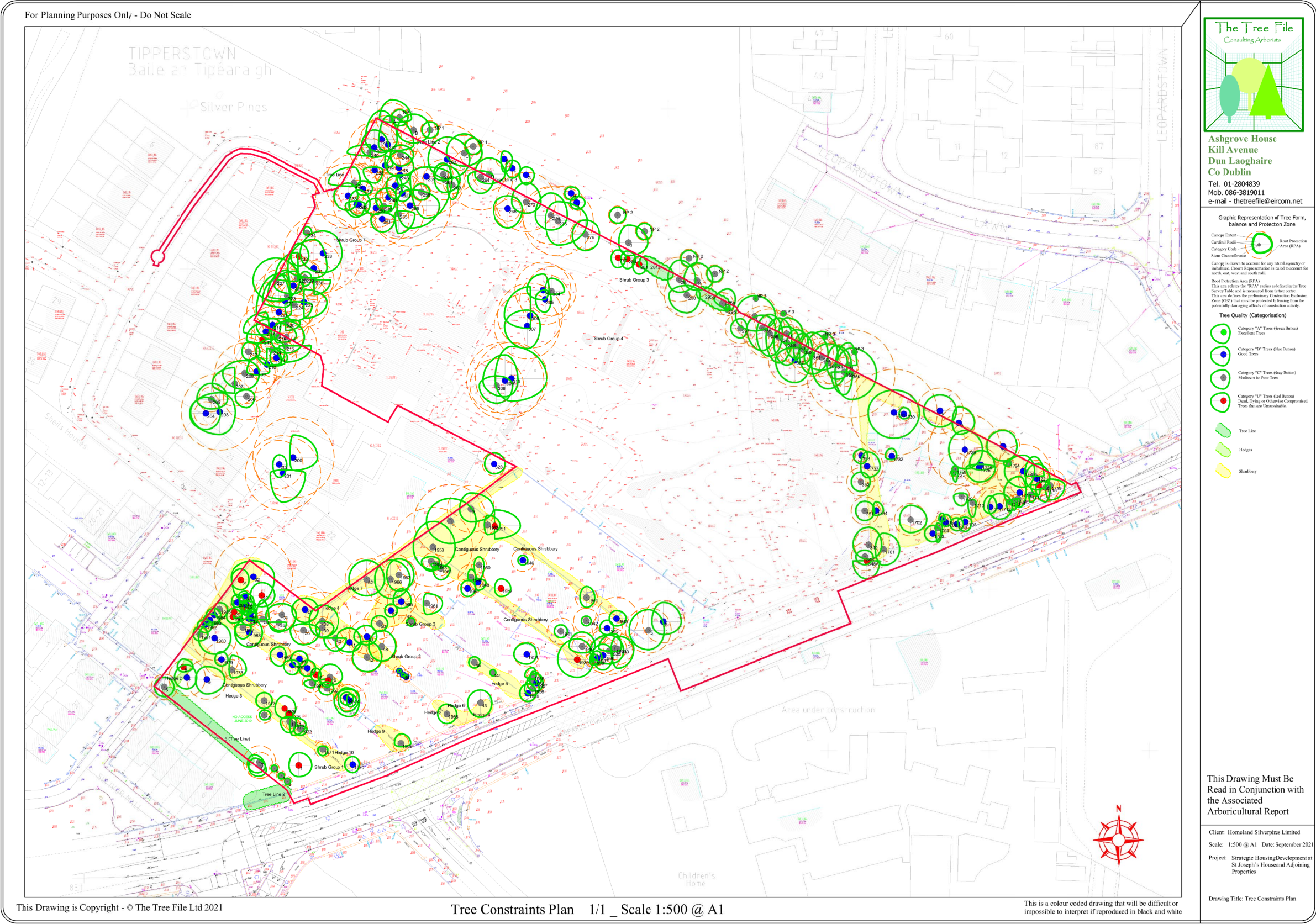
11 Residential Facilities + Crèche - Activating Public Realm



12 Building Height - Responding to Context

2.00 MASTER PLAN STRATEGY

2.2 TREE SURVEY - TREE CONSTRAINTS PLAN



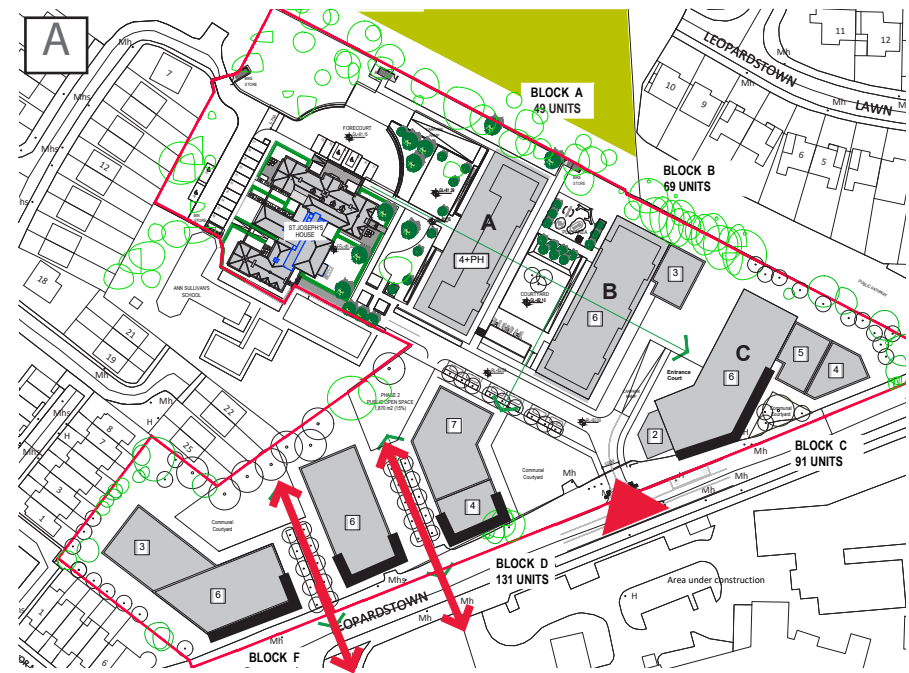
2.00 MASTERPLAN STRATEGY

2.3 ALTERNATIVES & EVOLUTION

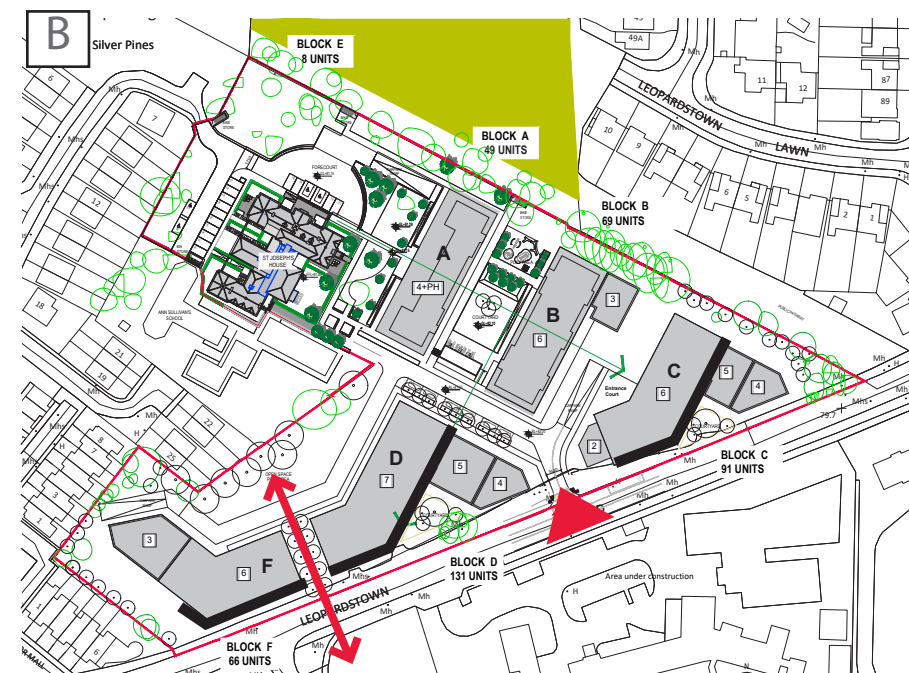
These options A-D have been outlined in the Environmental Impact Assessment Report, Chapter 4.0 - Examination of alternatives, before arriving at our final site layout.

Shown here are the four main options A - D which aimed to achieve the following key elements:

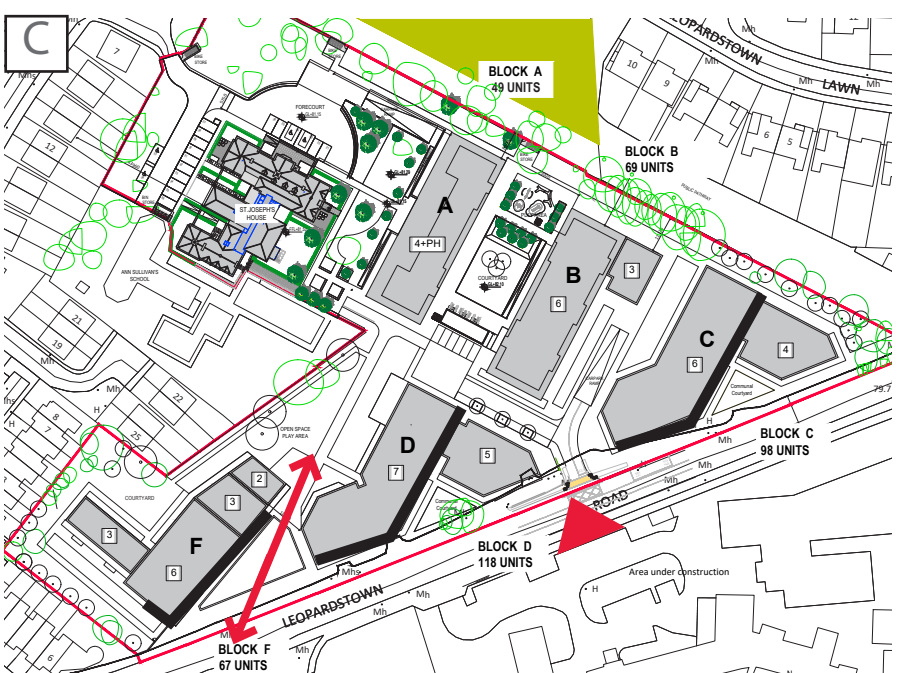
- Requirement to provide 10% public open space on the lands in accordance with the zoning objective.
- Retention of mature tree Planning objective on the site "To protect and preserve Trees and Woodlands".
- Definition of the public open space informed by the existing trees on site and the aim to create permeability through the site to the green way beyond.
- An assembly of apartment buildings of predominately 5 storey in height at the centre of the development forming a communal courtyard. In addition a 10 storey mid rise block was provided to add legibility and act as a focal point upon arrival.
- Provision of 3 storey housing element to the North Western edge interfacing with existing residential development and stepping down to 4 storey apartment blocks onto Leopardstown road.
- The existing historic building reinstated as object building in landscape.
- Access and Traffic strategy consisted of retention and re-use of the existing entrance off Silver pines with a new access created off Leopardstown Road.



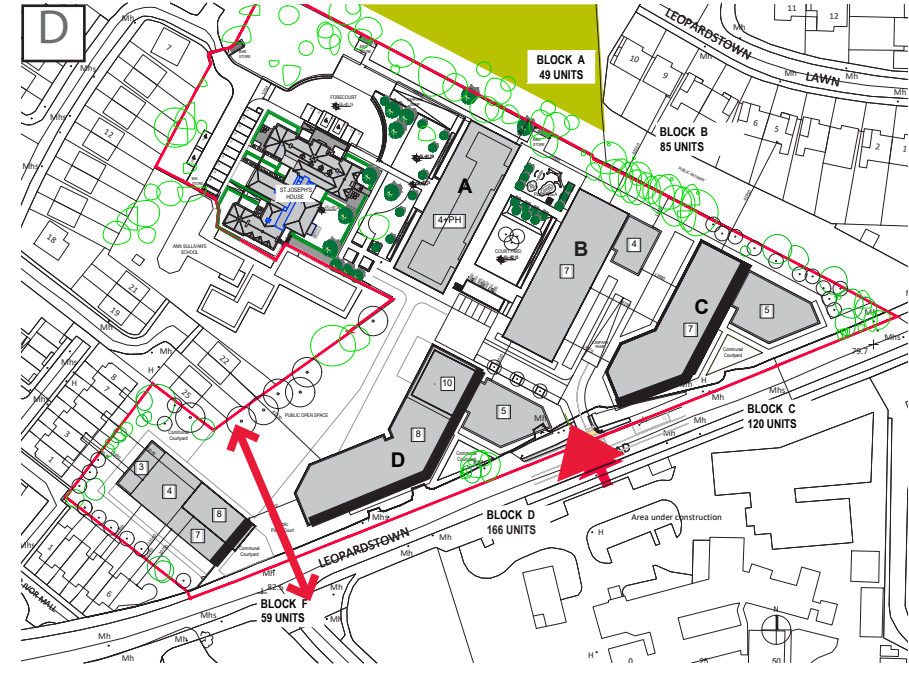
X SET BACK
X FRAGMENTED OPEN SPACE



X SET BACK
X LARGE OPEN SPACE TO NORTH



- RELATES TO PH.1 GEOMETRY
- PUBLIC SPACE TO STREET / SET BACK FROM ROAD
- SOUTH FACING COURTYARDS
- PERMEABLE



- RELATES TO PH.1 GEOMETRY
- PUBLIC SPACE TO STREET
- PERMEABLE
- CREATES STREET AT ENTRY

* Refer to drawings for the formal red line site boundary
the image shown relates to the main development site

02. MASTERPLAN STRATEGY

2.3 ALTERNATIVES & EVOLUTION SUNLIGHT ACCESS + SHADOW CAST STUDY

Our Final scheme developed from options A and B, with consideration for the following.

Looking to achieve the balance of streetscape while also consolidating one area of usable open space.

These initial sun studies also allowed the initial assessment of the impact of shadow cast and steered the design to minimise this within the open space.

These key drivers along with the focus to improve permeability through the site by creating a route through from Leopardstown Road to the public park lead us to the current configuration.

OPTION A 21ST MARCH 11:00 - 12:30



OPTION B 21ST MARCH 14:30 - 15:30



21ST MARCH (2 HOURS WITH 50% SUNLIGHT IN OPEN SPACE ACHIEVED)

2.00 MASTER PLAN STRATEGY

2.3 ALTERNATIVES + EVOLUTION

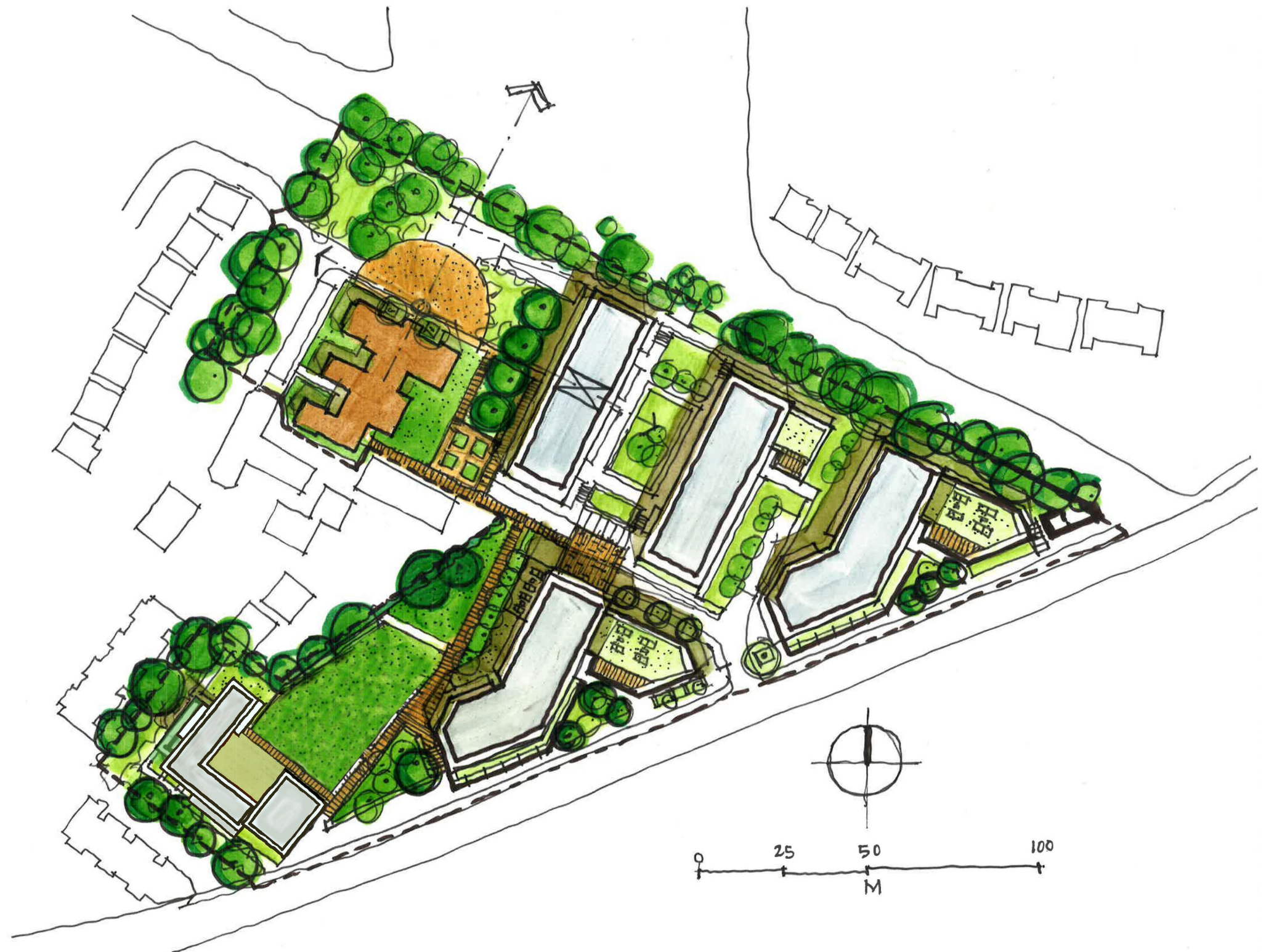
PROPOSED MASTERPLAN CONCEPT SKETCH

Historical mapping indicates the strong presence of an avenue approach from the Leopardstown Road with St. Joseph's house as the focal point at the end which is nestled within the sylvan wooded nature of the site. Our approach to the site planning reinforces this connection and visual link and as such the proposed new buildings and approach frame a view to the historical St. Joseph's house, which is a Protected Structure, in the background.

St. Joseph's house, which is proposed to be converted into residential units and also a creche (west section of the ground floor) is given suitable importance within the overall hierarchy of buildings. Its formal setting is re-established through the reconstruction of a large formal forecourt and green and its curtilage is protected through the retention of existing mature pine trees and landscape features including the introduction of private formal gardens around the house.

Both the existing house and the proposed new apartments enjoy a secluded site which benefits from tall mature Pine trees and dense screening along the site boundary. The buildings height and disposition on the site are such that the residents will feel that they are living within a large parkland setting whereby levels of privacy and open green amenity value are highly respected.

It is this project's vision to retain the sylvan characteristics of the site while introducing new residents' courtyards and green open spaces to further enhance its landscape and amenity value. It is planned to have a 'Tree walk' and jogging route around the perimeter of the site set amongst the mature trees while the new buildings are set back from the boundary to respect this 'Green' edge. The development will also further enhance pedestrian movement by creating pedestrian linkages between the residents' courtyard spaces and Leopardstown park and playing field to the North.



2.00 MASTERPLAN STRATEGY

2.4 HEIGHT STRATEGY

SITE LOCATION IN THE CONTEXT OF THE SANDYFORD/LEOPARDSTOWN URBAN DISTRICT

The site in relation to emerging context as describes in the LVIA chapter 12 of the EIAR:

Central Park, with frontage to both Leopardstown Road and the Luas line, is a fine grained, high density, mixed use development with buildings of up to 17 storeys. The South County Business Park has a more traditional campus character, the large office buildings separated by surface car parks and belts of woodland planting. The Sandyford area, particularly along the Stillorgan Reservoir frontage, is in the process of transforming into a high density, mixed use neighbourhood with buildings in excess of 15 storeys.

This latest phase of change has introduced significant new elements to the townscape, including buildings of distinctly urban typology, scale and architecture, and other contemporary features such as the Luas bridge at the Leopardstown junction. The junction itself has been reconfigured, from a roundabout reflecting its 20th century function (as a gateway to an industrial park and suburban area) to an urban junction with improved facilities for pedestrians and cyclists. The junction development also included a new public park and water feature/attenuation pond, located diagonally across Leopardstown Road from the site

The site location within this evolving urban district, its frontage to both Leopardstown Road and the greenway along the former railway line, and its proximity to Leopardstown junction, are important factors.

- ① Sandyford Area
- ② Central Park
- ③ South County Business Park
- ④ Greenway



2.00 MASTERPLAN STRATEGY

2.4 HEIGHT STRATEGY

The guidelines state a key objective of the National Planning Framework, if we are to deliver the required housing numbers without displacing developments and growing urban areas further outwards, is to significantly increase the overall density, scale and heights of buildings while also focusing on the development of urban infill sites and the reuse of existing buildings.

The Urban Development and Building Height guidelines state that local authorities should move away from restrictive approaches to building height and density that continue an unsustainable pattern of development whereby cities continue to grow outwards rather than consolidating and strengthening the existing built up areas and fail to make: *'optimal use of the capacity of sites in urban locations where transport, employment, services or retail development can achieve a requisite level of intensity for sustainability.'*

Increased building height is a key factor in assisting modern placemaking and improving the overall quality of our urban environments. They can also play a role in higher density developments by indicating important street junctions and public spaces which reinforces and contributes to a sense of place within a city.

The proposed configuration seeks to address the surrounding urban conditions by working with existing and historic building lines. Several different massing options were tested against the surrounding building heights and urban grain which resulted in a number of new building datums, with each responding to its adjacent urban condition. The proposal evaluated several different options which looked to provide a similar level of density in alternative urban forms. These have been outlined in the Environmental Impact Assessment Report, Chapter 4 - Examination of alternatives of the EIAR.



Revised view over Leopardstown Road showing 10 storey anchor



Building Height Responding to context



Proposed view to Sandyford along Leopardstown Road



Proposed view to Block D from Communal Gardens

2.00 MASTERPLAN STRATEGY

2.4 HEIGHT STRATEGY

A balance was struck to achieve the density required for a site of this size while also providing in excess of 25% Public Open space well above the 10% required and again exceeds the Communal Open space. The length of new street frontage created was also an opportunity to gradually step in scale and height from the neighbouring properties to the central Block D.

Block D with its 10 storey element serves to anchor the plaza at the end to the Communal gardens and also signifies the location of the Amenity spaces on the Ground floor along the homezone entry road off Leopardstown road. The main body of the Block steps down to a 7 storey brick massing with a set back PH level which is broken away from the 10 storey element. While a secondary element to Leopardstown Road steps down to 5 storey providing variation to the new street frontage created by this scheme.

Block C frames the other side of the homezone entry off Leopardstown Road and although it stepping down in scale it serves as a marker along Leopardstown road to the access point to the Green way. Similarly to Block D a secondary element to Leopardstown Road steps down to 5 storey providing variation to the new urban street.

Blocks B and A step down into the site along this Greenway edge to the North forming a comfortable relationship to the existing St. Josephs house to the back of the site while also providing a sense of passive surveillance over the Greenway.

Block F as explained has undergone the greatest redesign of all Blocks since the pre planning stage with the frontage onto Leopardstown road reduced from 8 to 6 storey and the main body of the building stepping down to 3 storey serving as a gradual transition to the neighbouring properties of St. Ivors Mall and Minstrel Court.

The Sunlight analysis also verifies that the height in the current scheme allows for all of the standards to be met across the Public open space, for more details on the sunlight daylight please refer to ARC reports.

In addition to the above please refer to the Material contravention statement which has been submitted by Brock Mc Clure.



Proposed South East view

2.00 MASTERPLAN STRATEGY

2.4 HEIGHT STRATEGY

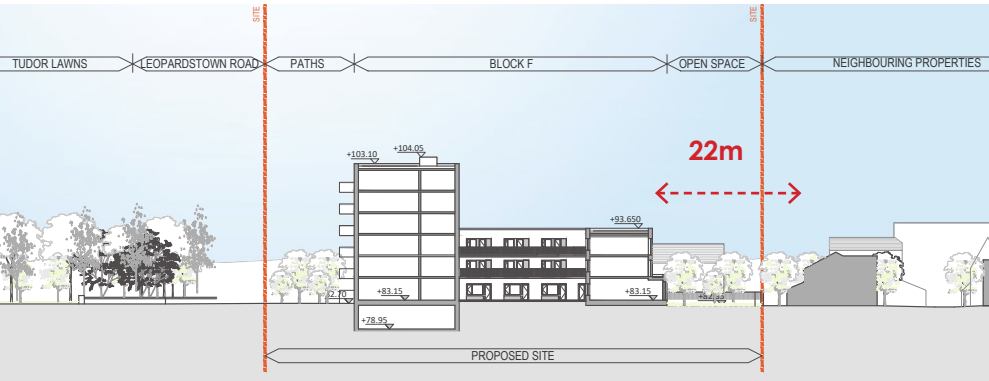
SEPARATION DISTANCES

The overall building form and layout is set up by a series of key adjacencies and continuation of existing building lines. These set up a series of urban blocks, each responding to different conditions.

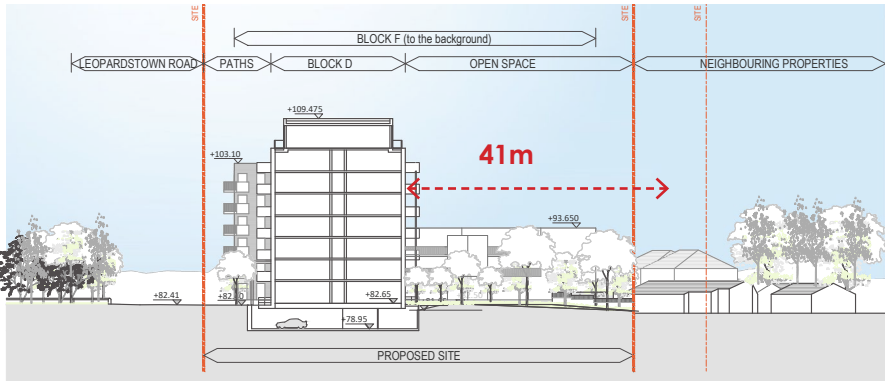
The existing tree band to the North & East of the site and St. Josephs house in addition to creating a new urban street scape along Leopardstown has also shaped the current scheme. Given those constraints we have worked to ensure all relevant separation distances are respected as noted on the plan on this page with the sections showing key relationships to neighbours shown below.



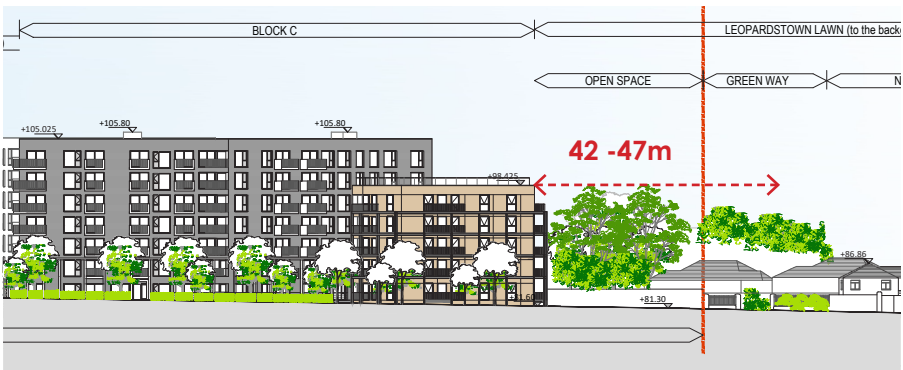
Proposed Separation Distances



Proposed Block F to Minstrel Court



Proposed Block D with recessed PH level



Proposed Block C to Leopardstown Lawn

2.00 MASTER PLAN STRATEGY

2.5 OVERVIEW



VIEW FROM SOUTH EAST -AERIAL

2.00 MASTERPLAN STRATEGY

2.5 OVERVIEW



VIEW FROM NORTH -AERIAL

2.00 MASTERPLAN STRATEGY

2.5 OVERVIEW



VIEW FROM WEST -AERIAL

2.00 MASTERPLAN STRATEGY

2.5 OVERVIEW



VIEW FROM SOUTH WEST -AERIAL

2.00 MASTERPLAN STRATEGY

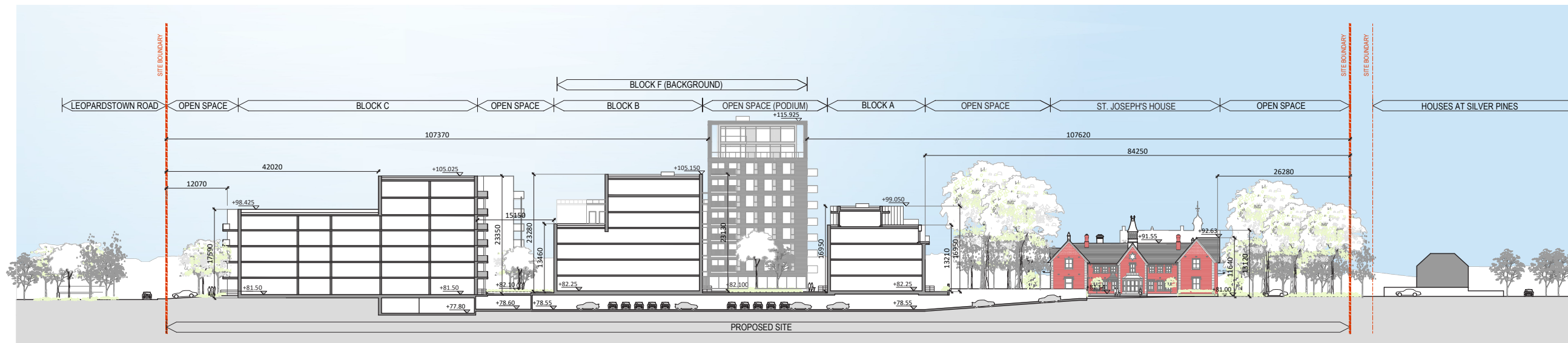
2.5 OVERVIEW



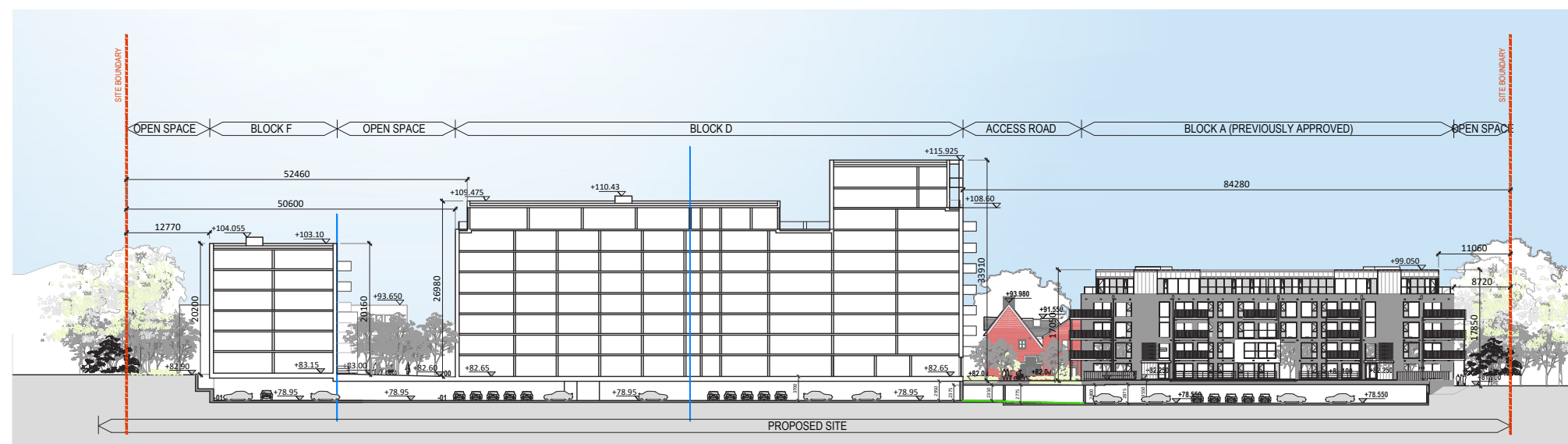
VIEW FROM EAST -AERIAL

2.00 MASTERPLAN STRATEGY

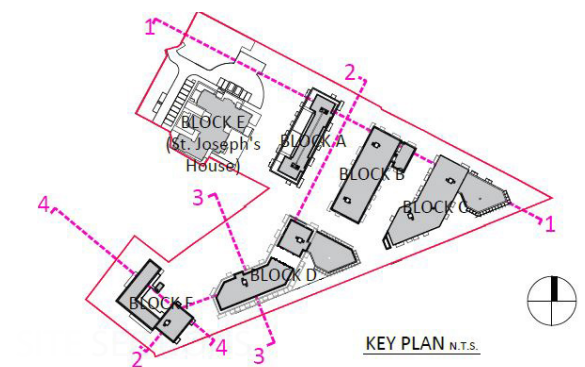
2.6 SITE SECTIONS



SITE SECTION 1-1

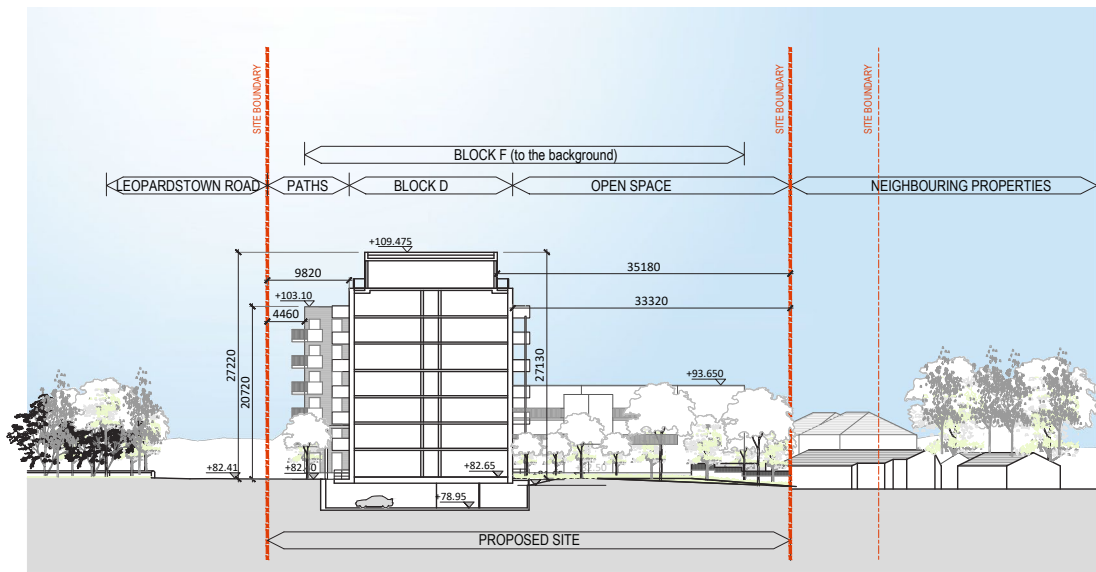


SITE SECTION 2-2

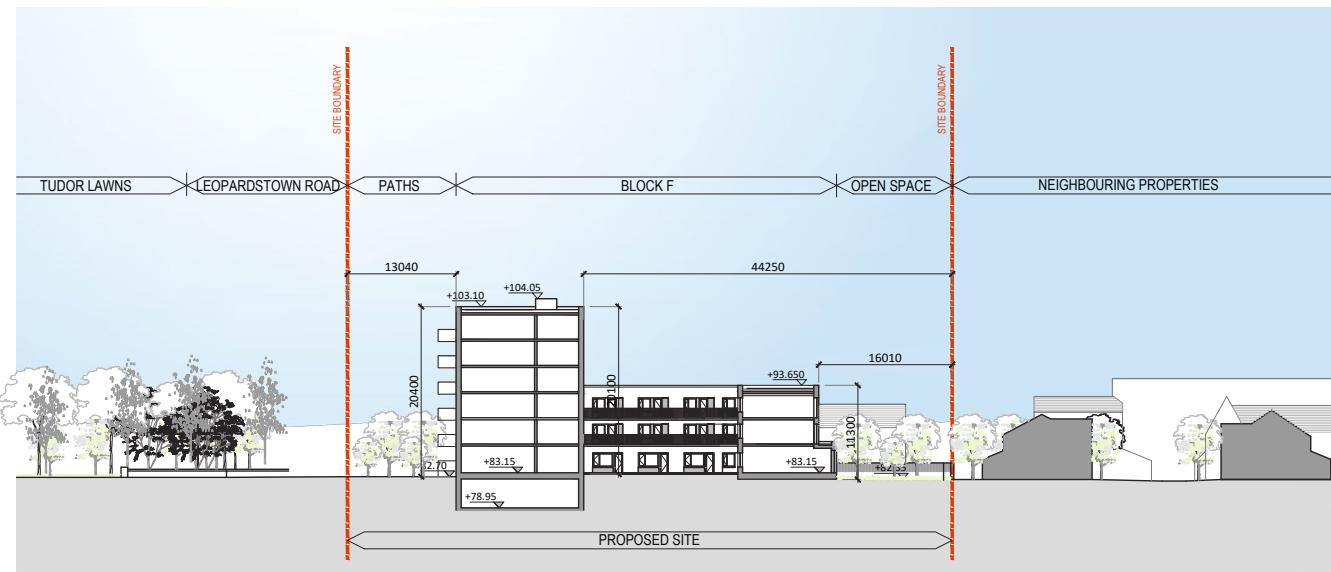


2.00 MASTERPLAN STRATEGY

2.6 SITE SECTIONS



SITE SECTION 3-3



SITE SECTION 4-4

