











3.0 Design Concepts + Evolution



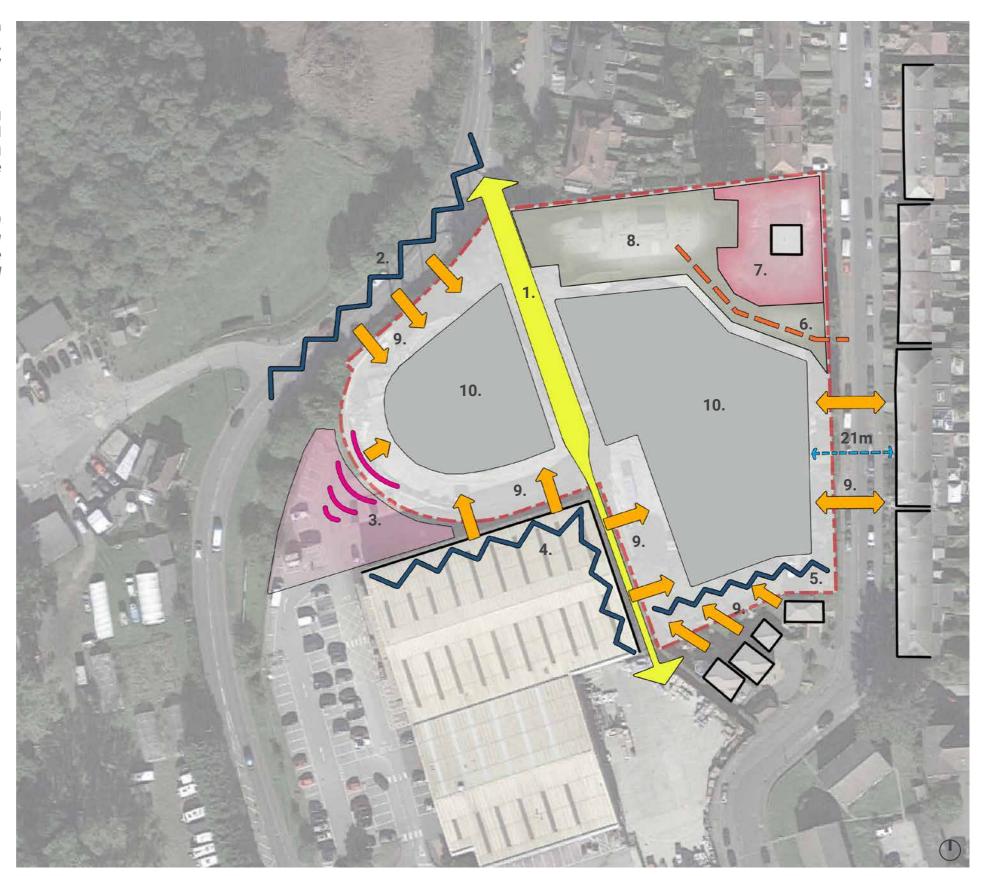


The initial design process began with the two concept diagrams (on this page and the next page) which analysed the various site conditions, including opportunities and constraints. All of these elements strongly informed the design in terms of siting, massing and building typologies.

This first concept diagram highlights all of the site constraints including noise, required development setbacks, existing gas infrastructure and adjacent properties. Very quickly, the negative space created by carving out these constraints, formed a possible developable area for the scheme (shown in light grey).

Please note that any boundary lines shown within this section (3.0) are representative of the SGN ownership boundary and not the planning boundary line for this application. This is because in the early stages of the design process the precise extent of the proposal was undetermined as all potential options were being explored.

- 1. Public right of way
- 2. Noise from A225 traffic
- 3. Noise from deliveries and parking lot
- 4. Wickes shed / Poor aspect
- 5. Existing outlook from neighbouring properties
- 6. Existing gas main
- 7. Leasehold property
- 8. Gas operations compound
- 9. Required set-back
- 10. Developable area

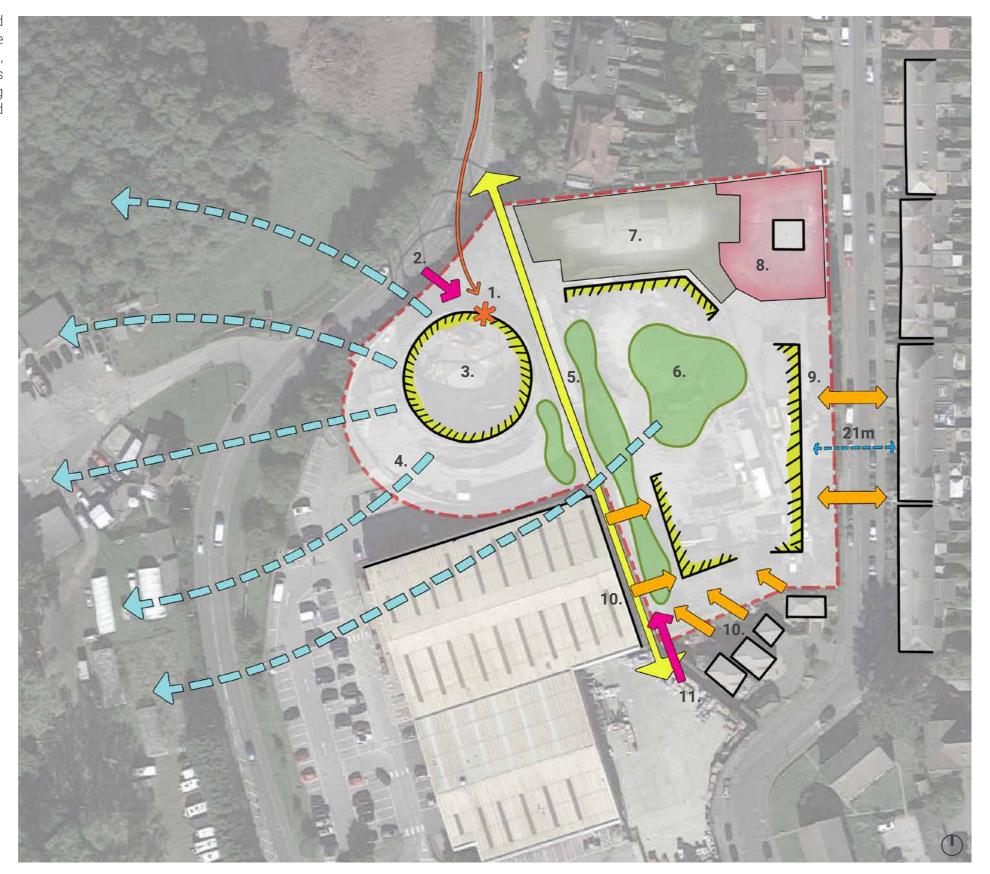






Excluding the SGN operational land, the existing house/property and neighbouring setbacks, this second concept diagram highlights all of the site opportunities. These opportunities include creating a landmark form, continuing the circular typology of the gasholders, emphasising views towards the Wildlife Reserve, enhancing the public footpath and creating a new public space. These opportunities further shaped the form and location of the scheme, including where the open spaces could be.

- 1. Retention of landmark form / gateway to Sevenoaks
- 2. Open site at north
- 3. Continuation of circular typology
- 4. Views towards Sevenoaks Wildlife Reserve
- 5. Public footpath to be retained and enhanced
- 6. Creation of new public space
- 7. Gas operational land to be retained
- 8. Existing house and rear garden to be retained
- 9. Follow existing townscape / set-back from the road
- 10. Set-back from neighbours
- 11. Open site at south



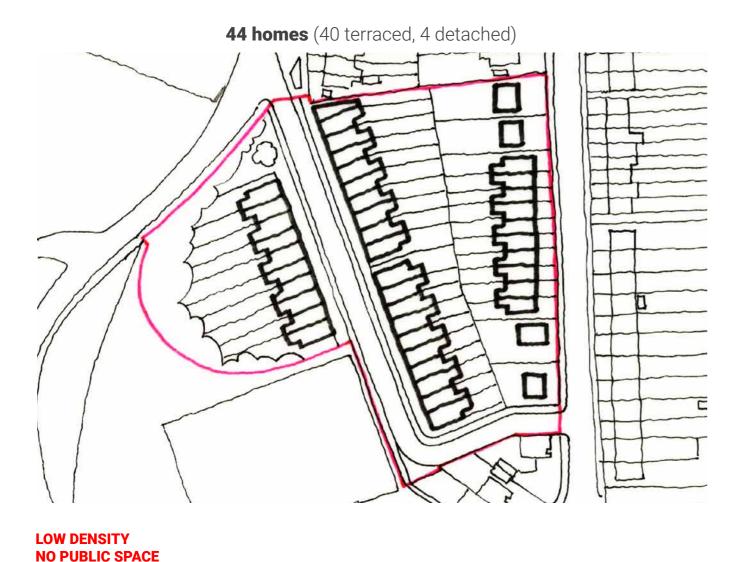


3.2 Design Development

drawing up hand sketches of potential site layouts, exploring different scales and combinations of building typologies. These sketches included were not certain what the plan was for these components at the time.

in terms of density and public space using a traffic light system. This traffic solely of terraced or detached homes. and excluded the SGN operational land area and adjacent house, as we light system follows that green is the most desirable option, orange/amber is a good/fair option and red is the least desirable option.

Whilst we were forming the conceptual diagrams, we were simultaneously. There were 6 hand sketches, shown on the next three pages, which varied. These assessments made it apparent that any feasible scheme would in density from 44 homes to 144 homes. These 6 options were assessed have to have a portion of block development(s) and could not be comprised



66 homes (32 apartments, 30 terraced, 4 detached)

LOW DENSITY NO PUBLIC SPACE

DESIGN & ACCESS STATEMENT March 2021 **SEVENOAKS GASHOLDER SITE** 30



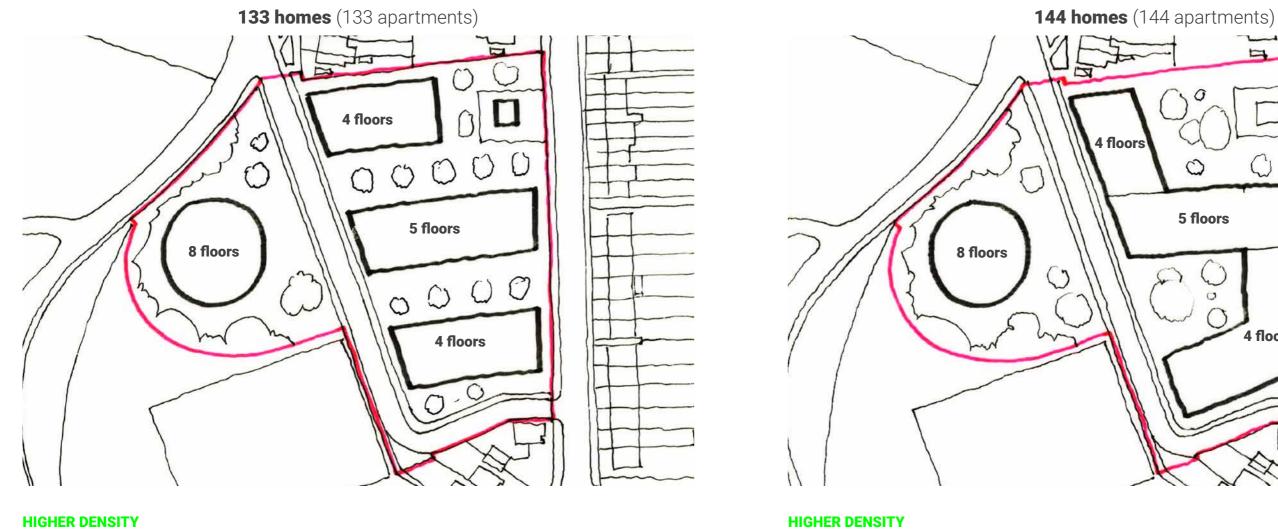


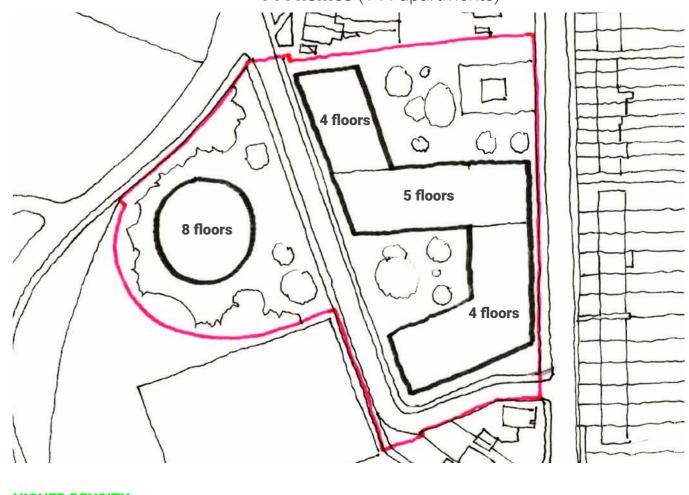
94 homes (72 apartments, 18 terraced, 4 detached)

4 floors



PUBLIC SPACE

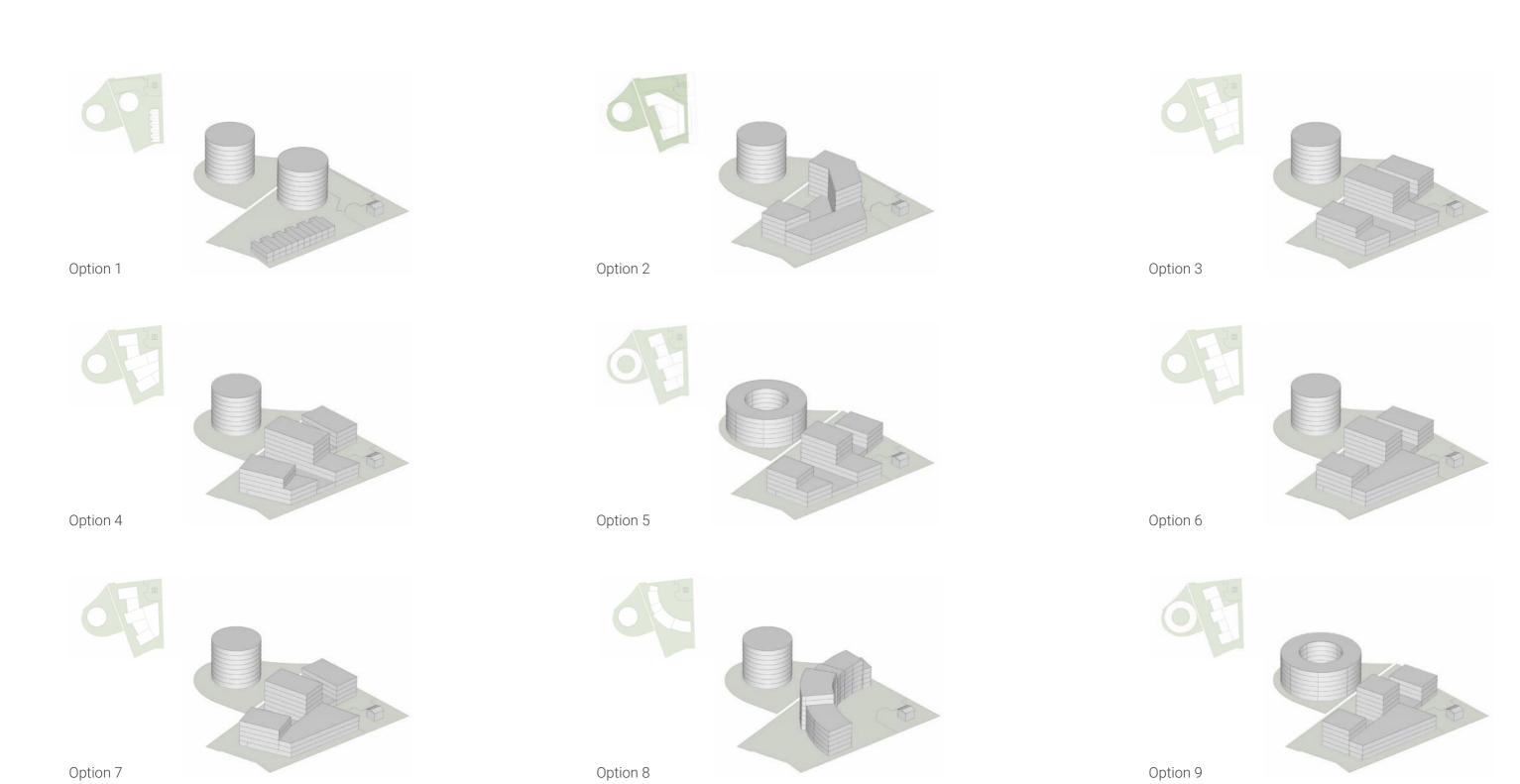








Using the principles established by the concept diagrams and the initial hand sketches, we then created 9 different massing schemes to test in a 3D digital format.



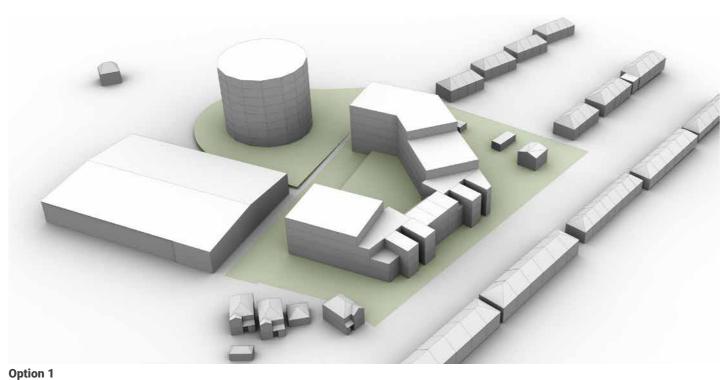


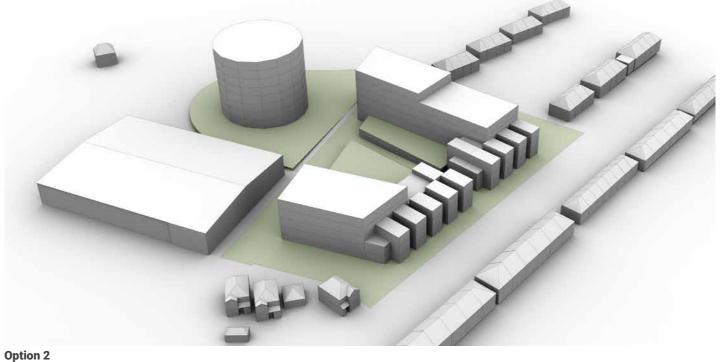


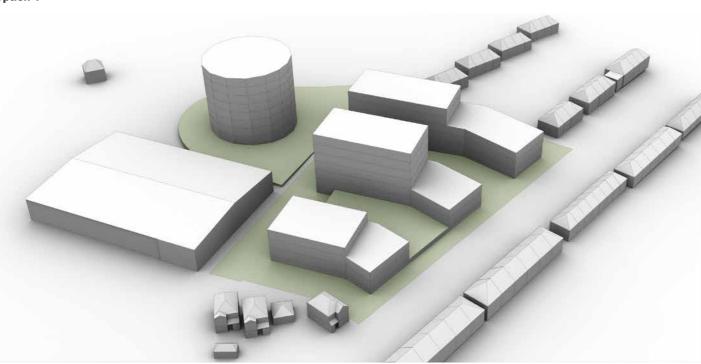
Option 3

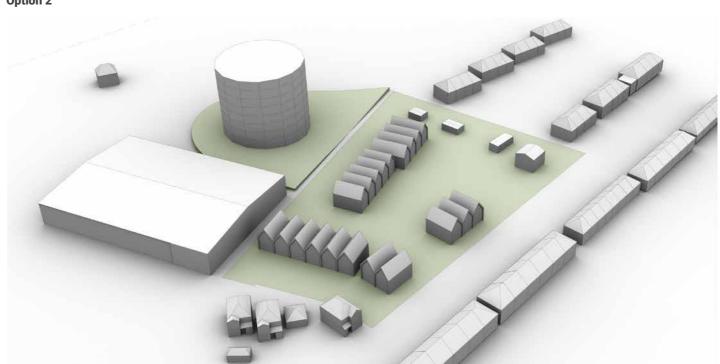
From there we looked at all of the options we had produced thus far, of the massing models with the addition of townhouses along Crampton's forms crank and it eliminates the existing house and even further reduces to or derivatives of the previous options. Option 1 is based upon Option 2 footpath bisecting the site. Option 3 is similar to massing option 3 but the option generated.

including the 6 initial hand-drawn sketches and the 9 massing models, Road. Option 2 is a version of Option 1 that eliminates the existing house the SGN operational land area. Option 4 is a rotunda and terraced housing and came up with 4 further options to investigate further. None of these 4 and reduces the SGN operational land area. Additionally, it carves a path option, a bit similar to the third hand-sketch. Plan diagrams were created options are identical to any of the previous options but instead are similar through the centre of the site connecting Crampton's Road with the public for these 4 options to more accurately determine the number of units each









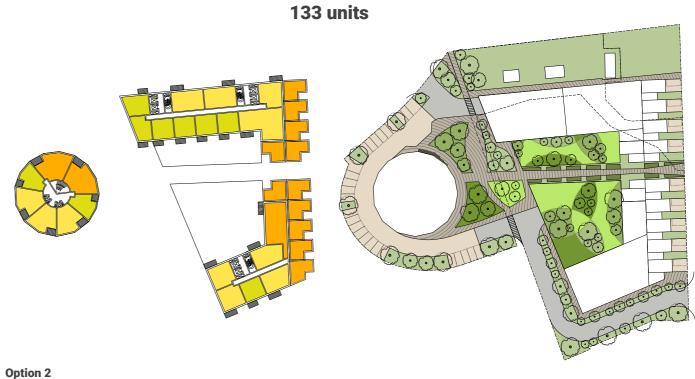
Option 4





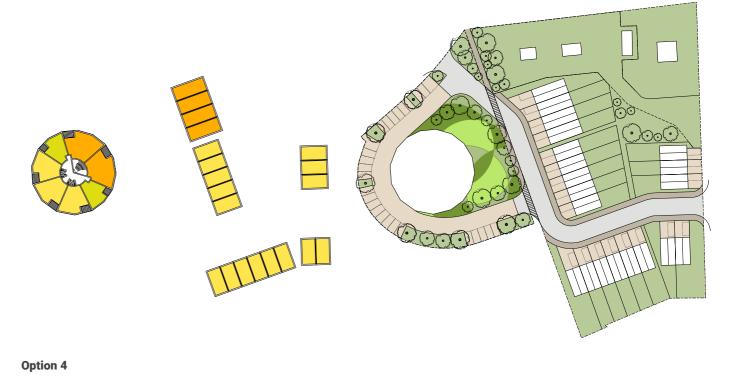
Option 3





73 units

158 units



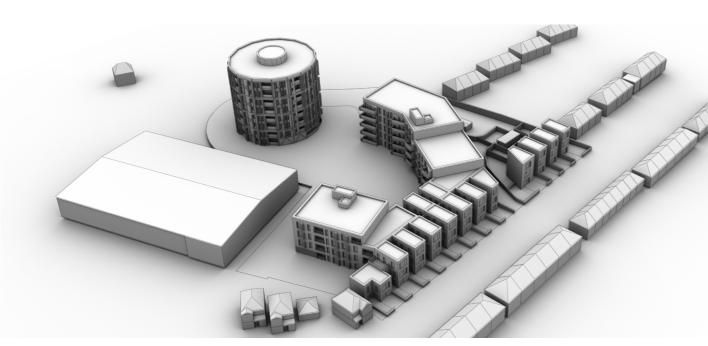




After assessing the previous 4 options, it was determined that the outlined option 1 was the best to proceed with for the pre-application as it does not impact the operational land area and the existing house and garden can be retained. This option is also the strongest due to its lower density, stepped blocks, townhouses that reinforce the streetscape and is the most respectful of its neighbours.

We then took this scheme and developed it further to include detailed plan layouts and a detailed massing, which was then submitted for the preapplication. Some of this material is found on the next three pages.







Aerial view from southeast

Aerial view from southwest







SEVENOAKS GASHOLDER SITE DESIGN & ACCESS STATEMENT March 2021











Housing Typologies Precedents

We are proposing 3 different housing typologies on the site. The first The second typology is the stepped block typology, which runs parallel to The third typology is the townhouse typology, which provides a domestic typology is the rotunda typology. Due to its volumetric resemblance to the elements such as streets and footpaths and steps in relation to its context. scale infill similar to the surrounding terraced houses, reinforcing the gasholder structures, it provides a strong height and massing precedent and also reflects the site's industrial history.

streetscape of Crampton's Road.

Rotunda







Block





Townhouses



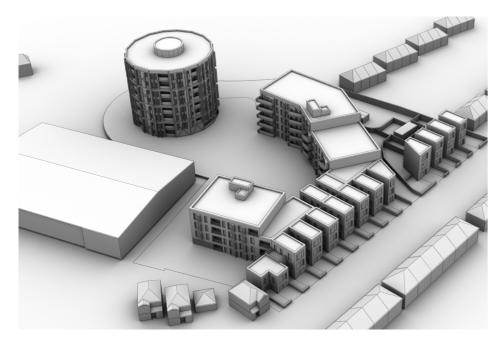


3.4 Pre-Application Feedback

the design received from Sevenoaks District Council (SDC) in the formal response, at three meetings and also comments from the Design Review landmark building that celebrates their historic townscape presence and Refer to section '5.0 Landscape' in this Design and Access Statement Panel. This section also describes how or where these comments have respects the historic character of this prominent site. been addressed.

First Pre-Application Meeting & Formal Pre-Application Response

The following text describes SDC's responses (italicised) to the design in the first pre-application meeting (11.08.2020) and in the formal pre-application response (24.10.2020) and how the current proposal has addressed these comments.



A Design Review Panel is recommended

Response: A Design Review Panel was completed on 20 November 2020.

· General layout is acceptable, but concerned about 8 storey height, and scale and design

Response: On reviewing the heights across the site we opted to reduce the height of the North Block which is closer to existing residents and increase the Rotunda to bring it in alignment with the original scale of the gasholder. The rationale for a taller building on this site is based upon 2 key grounds:

The following three pages summarise the pre-application feedback on Firstly, that the scheme seeks to reflect the historic mass and volume of **Response:** The proposed scheme deals with this, retaining the levels of the gasholders that stood on the site for over 120 years and to create a the existing footpath and ensuring accessible routes throughout the site.

> Secondly, through a sound townscape assessment, to ensure that a · Landscaping to boundaries needs to be improved taller building in this location, through high quality design and carefully considered siting, does not adversely impact the character and context of **Response:** The proposed landscape design addresses all boundary the area or harm the outlook and amenity of existing residents.

We note the observation regarding the solidity of the proposed rotunda in section '5.0 Landscape' in this Design and Access Statement. comparison with the transient openness of the original holder, but we don't believe this constitutes an argument for a specific reduction in height. The original holders were 29m and 31m in height respectively. When inflated, which they were on an almost daily basis, they formed a solid mass, when deflated they still formed an open mass, but those dimensions and their presence on the skyline was constant for many generations. We feel that the townscape design (and therefore the height of the new buildings) should be assessed via comparison with the original height and mass on the site and not against the transient openness of the holder frames.

· Design of townhouses appears cramped and awkward

Response: Proposed scheme shows revised massing to the townhouses which have been softened with more subtle steps in massing which we feel sits better in the Crampton's Road context Refer to the visuals throughout this Design and Access Statement.

· Relationship between proposed building and existing neighbours needs further assessment

Response: Proposed elevations show these relationships and the carefully considered stepping in heights. Refer to the Townscape Assessment submitted as part of this planning application.

• Rotunda acceptable in principle, but height needs to be justified (townscape assessment needed)

Response: Refer to the Townscape Assessment submitted as part of this planning application.

• Public right of way should be retained, and topography for site should be

conditions including introducing increased planting, softscaping and brick planter that acts as a gateway to the main pedestrian entrance. Refer to

Proposals should not overlook neighbours

Response: This has been central to the approach to massing and is clearly demonstrated in the townscape assessment. Refer to the Townscape Assessment submitted as part of this planning application.

 Townhouses close to each other and need adequate natural light, outlook and ventilation, particularly if single aspect

Response: Adequate natural light, outlook and ventilation has been achieved on all dwellings. Refer to the Energy Strategy and Daylight & Sunlight reports submitted as part of this planning application.

• Defensible space needed for ground floor units, and balconies should be recessed

Response: Visuals throughout this document will show the amenity, outlook and privacy of the dwellings. The private amenity spaces are primarily recessed, on the roof or surrounded by planting or trees.

• Should be a 21m distance between directly facing habitable windows

Response: Crampton's Road has minimum 22m distance. There are no directly facing habitable windows between apartment blocks and existing houses, though distance to south is +20m and to north is +24m. In terms of the new development, we have a corner pinch-point of 17m between the rotunda and corner of the north block, though these windows are not directly facing

· Adequate noise attenuation needed due to relationship with commercial properties



3.4 Pre-Application Feedback

Response: Site survey was undertaken and detailed report has resulted in Second Pre-Application Meeting (06.11.2020) acoustic louvre panels where necessary on the rotunda and north block. Refer to the Noise Impact Assessment submitted as part of this planning application.

Detailed ground contamination assessment required

Response: Refer to the Geotechnical and Geoenvironmental Desk Study submitted as part of this planning application.

· Until new Local Plan is adopted, the affordable housing requirement is 40% (65% social rented/35% intermediate split)

Response: Refer to the Viability Assessment submitted as part of this planning application.

· Should engage an RSL and affordable should be in its own block

Response: Refer to the Viability Assessment submitted as part of this planning application.

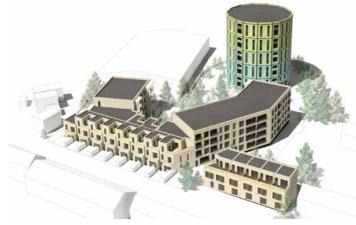
 Concerned about impact on road network, particularly as Bat and Ball junction is at capacity

Response: The junction capacity assessment of Bat and Ball junction has determined that the site will have a minimal impact on the operation of the junction. The additional vehicles which will pass through this junction as a result of the development are very low and will have a negligible impact on its operation. It is understood that improvements to the junction may come forward as part of over proposed developments in the area, should this be the case the proposed development will have a negligible impact on any new layout as well. Refer to the Transportation Assessment submitted as part of this planning application.

Need to look at sustainability, SUDS and biodiversity enhancements

Response: The proposal incorporates a number of sustainability and energy saving measures, a sustainable drainage system and biodiversity enhancements. Refer to section '5.0 Landscape' in this Design and Access Statement, and the Energy Strategy and Drainage Strategy reports submitted as part of this planning application.

The following text describes SDC's comments (italicised) on the design during the second pre-application meeting and how the current proposal has addressed these comments.



 Concerned about the visual/massing transition from development to neighbouring properties on Crampton's Road

Response: The removal of the phase 2 portion of the proposal helps this transition by using the existing house as a way to mediate the height difference between the development and the properties north of the site. public amenity space at the heart of the site. The southernmost townhouse is also only 2-storeys which is the same as the properties to the south of the site. Refer to the Townscape Assessment submitted as part of this planning application.

• The scope of the Townscape Assessment should include long distance views including near McDonald's roundabout, from the M25, Bat and Ball Junction, Wildlife Reserve and North Downs

Response: Refer to the Townscape Assessment submitted as part of this planning application.

· Not happy with London Stock brickwork or the all glazed brick rotunda facades

Response: All London Stock brickwork has been replaced by 4 types of red/ multicoloured brick. The glazed brick on the rotunda has been massively reduced to be only cladding the vertical piers.

• The bin/cycle stores to the townhouses are large **Response:** The bin/cycle stores have been reduced in overall size and then **Response:** Refer to the visuals throughout this document.

grouped in pairs to reduce the overall visual impact/clutter.

Need to understand the impact the rotunda has on sunlight/daylight

Response: Refer to the Energy Strategy and Daylight & Sunlight reports submitted as part of this planning application.

• Draw people into the site from the south with light and views

Response: The landscape design involves removing the existing fence to the east and introduces planting, trees and a widened public footpath which gives views of the shared amenity space at the heart of the site. Refer to section '5.0 Landscape' and visuals throughout this Design and Access Statement

• Query as to what is happening at the north site entrance

Response: In the proposal, the main vehicular access is now framed by two small brick enclosures and an overhead sign to mark the site entrance from the Otford Road. A triangular planter and widened public footpath forms the pedestrian gateway into the site with views towards the shared

Interested in rotunda facade treatment and alternative designs

Response: The proposed rotunda design is more reminiscent of the rhythm of the former gasholder structures and more in keeping with the local vernacular than previous versions.

• Gates to the SGN operational area may be better than bollards

Response: Gates to SGN operational area form part of the proposal. Refer to section '5.0 Landscape'.

• Electric charging points required on-site

Response: Refer to the Transportation Assessment submitted as part of this application.

Visuals should show human level experience, not just aerial/birds eye



3.4 Pre-Application Feedback

Design Review Panel (20.11.2020)

The following text describes the panellist's key comments (italicised) on the design during the Design Review Panel and how the current proposal has addressed these comments.



Carry out a combined TVIA / LVIA analysis to inform the design development and build the evidence base for this proposal from a thorough understanding and analysis of the site context (particularly in relation to acceptable building height)

Response: The format and content of a Townscape Assessment including selection and positioning of views was subsequently developed and agreed with Planning Officers and is submitted as part of this application.

 Describe the proposal in both two and three dimensions within its wider context beyond the red line boundary of the application site to appraise how it fits into this setting, including long section drawings

Response: Further section, elevation and 3D view information has been developed and submitted within the Townscape Assessment and Design and Access Statement as part of this application.

· Reconsider both the form and the mass of the buildings and what the appropriate references are to guide design decision making.

Response: Following detailed townscape analysis (submitted with this application) and a further review of previous alternative forms and massing approaches (also included in this DAS) the Design Team concluded

that referencing the circular typology of the existing gasholder within a • Further work and information on materials palette varied approach to block types stepping down towards and away from neighbouring properties was the right approach to this constrained and **Response:** Refer to sections '4.11 Overall Rendering' and '4.12 Materials complex site.

· Explain the iterative design development and testing and evaluation of options for development on this site.

Response: Refer to section '3.2 Design Development' in this Design and Access Statement.

• Ensure that a high-quality landscape environment is achieved across the development to avoid parts of the site becoming unattractive for residents on account of access and parking arrangements

Response: See high quality landscape proposal in section '5.0 Landscape' in this Design and Access Statement.

Third Pre-Application Meeting (06.12.2020)

The following text describes SDC's comments (italicised) on the design during the third pre-application meeting and how the current proposal has addressed these comments. Several of the comments were comments carried over from the DRP.

• A townscape analysis is required, but a formal TVIA/LVIA is not necessary.

Response: Refer to the Townscape Assessment submitted as part of this planning application.

• For the townscape analysis, the view from Rye Lane is to be added, and further analysis on progression of views from Bat & Ball junction (including of bend on approach to Wickes)

Response: Refer to the Townscape Assessment submitted as part of this planning application.

• Previous design development work showing all options previously explored

Response: Refer to section '3.2 Design Development' in this Design and Access Statement.

and Elevational Treatment' in this Design and Access Statement.

Understanding arrival experience and journey through site

Response: Refer to section '5.0 Landscape' and visuals throughout this Design and Access Statement.

Further work and information on boundary treatments

Response: Refer to section '5.0 Landscape' and visuals throughout this Design and Access Statement.

Understanding daylight and sunlight impact of rotunda

Response: Refer to the Energy Strategy and Daylight & Sunlight reports submitted as part of this planning application.

Visuals should include the materiality' of existing context

Response: Refer to visuals throughout this Design and Access Statement.

· Contextual analysis of local social infrastructure i.e. Bat & Ball Station, community facilities, shops, pedestrian and cycles routes etc.

Response: Refer to section '2.4 Local Amenities' in this Design and Access Statement..



4.0 Proposal



The pre-application scheme was refined further and amended in coordination with the all of the pre-application feedback (see previous section 3.4), cost, structure, services, acoustics and CDM. The pre-application scheme and the proposal are similar in architectural intent with the main differences being the following:

- Townscape assessment, encouragement from councillors on density and ongoing viability assessment have brought the scheme to 136 units
- The fifth storey on the north block has been removed to safeguard outlook and amenity to existing residents
- Two additional stories added to the rotunda to better reflect the historic volume
- New treatment and rationalisation of rotunda facades
- New townhouse designs to sit better with the Crampton's Road context
- Minor change in dwelling mix
- Amendments to plant areas and moving of substation and generator to outside of the buildings on the site
- New self-supported balconies to inward facing public space for north and south Blocks, with all other balconies recessed as suggested by officers
- Reduction in depth of oriel bay windows
- Amended road, parking, podium and landscape layout (including all footpaths and stairs) to preserve existing public footpath levels and ensure accessibility throughout

The proposed scheme can be summarised as follows:

- 136 homes: 1 no. studio flat, 45 no. 1 bed flats, 57 no. 2 bed flats, 23 no. 3 bed flats, 1 no. 2 bed townhouse, 9 no. 3 bed townhouses
- Three building types; rotunda, blocks and townhouses
- · All buildings clad in high-quality brick
- All dwellings have private amenity space and meet Nationally Described Space Standards
- All dwellings have been designed to meet building regulations Approved Document Part M4 (2) with one townhouse designed to meet Approved Document Part M4 (3)
- 97 car parking spaces and 184 cycle parking spaces

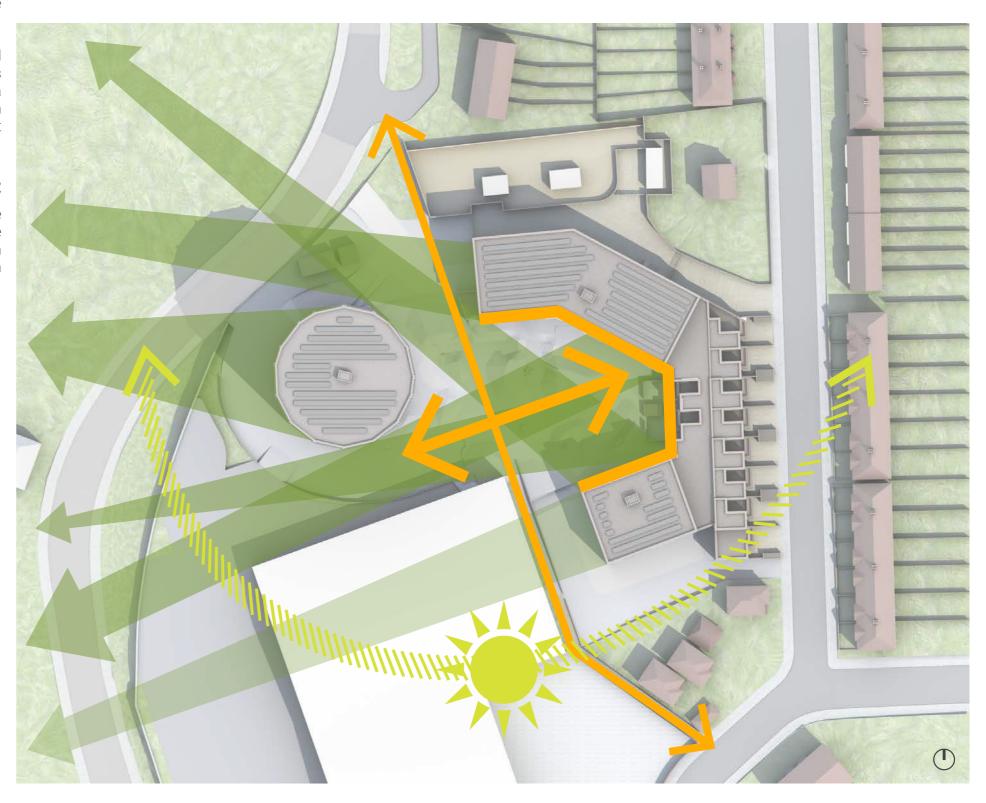




The rotunda building to the west is orientated to maximise views to the Sevenoaks Wildlife Reserve to the west whilst maintaining an appropriate distance from the retail warehouses to the south.

The main group of buildings to the east (north and south blocks and townhouses), are also orientated to maximise views to the Sevenoaks Wildlife Reserve to the west. The C-shape of this overall form creates a heart at the centre of the site that physically surrounds a new shared open space. This shared open space extends out from the public footpath that bisects the site.

The majority of the units face east or west with some south-facing units, some dual-aspect units and only very few north-facing units. The open/undeveloped nature of the land to the west of the site means that the site receives ample late-afternoon and evening sunlight. Additionally, to the east and south, all surrounding buildings are 2-3 storeys in height which allows sunlight to penetrate the site in the morning and throughout much of the day.

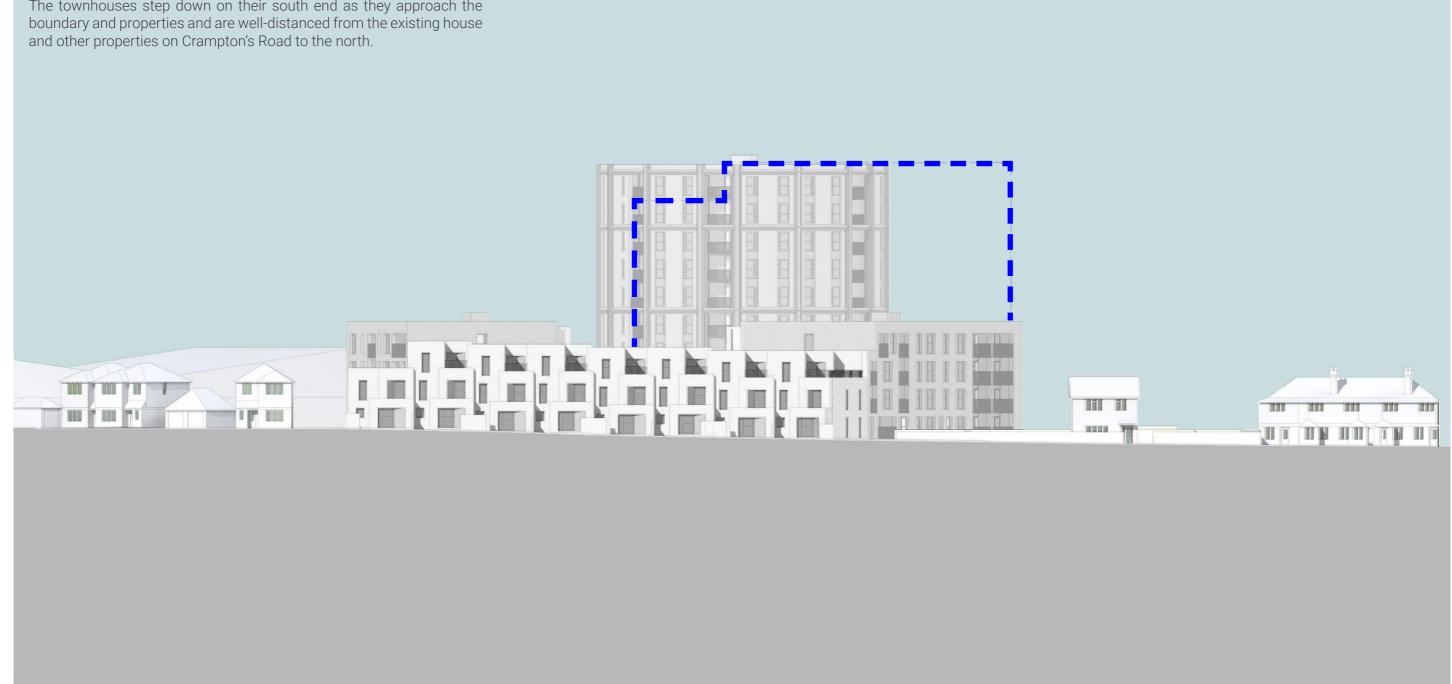




The height of the west rotunda building was defined by the overall height of the original gasholders (dashed blue lines) and the massing references their circular typology.

The north and south blocks step down as they move towards Crampton's Road and the townhouses.

The townhouses step down on their south end as they approach the





Vehicular

The principal vehicular access point is off Otford Road to the northwest and will allow for both vehicular ingress and egress. This point of access will provide access to the area of car parking located around the periphery of the Rotunda and the podium car park located within the North Block.

The secondary vehicular access point is from Crampton's Road to the southeast and is for vehicle ingress only. It will be used by primarily by residents parking in the south block, as well as by delivery and servicing vehicles and emergency vehicles as a point of access to the site. After accessing the site from this location, the vehicles will travel in a westbound direction, around the Rotunda, where an area of parking is provided. This through-route will not result in rat-running as there is no desire lines and it is a convoluted route around the rotunda with many horizontal and vertical movements required throughout (see diagram at bottom of page).

Pedestrian

Pedestrian access through the site is retained via a much improved public footpath, giving public access to the generous open landscaping at the heart of the scheme.



Convoluted Through-Route Prevents Rat-Running



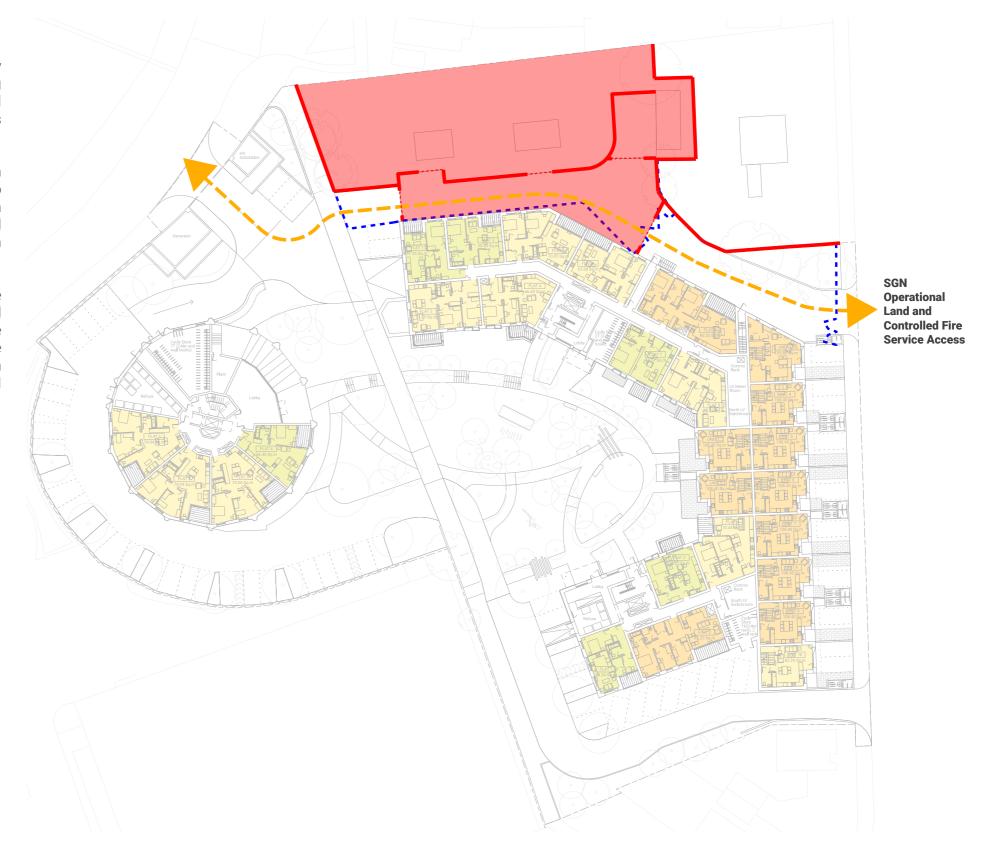


SGN Operational Land

SGN will require ongoing access to the northern part of the site, where they have three existing structures containing an Active Pressure Reducing System (PRS) within a secure, fenced operational area. Additionally, it will be necessary for fire services vehicles to be able to use this area to access the dry riser inlet for the north block.

Although SGN and fire services vehicles can enter/exit this area from either Otford Road or Crampton's Road, the preference is for vehicles to enter from the east using the existing access on Crampton's Road. Upon departure, vehicles will exit the site using the main site access on Otford Road. Within the compound there is also a dedicated area in which a 10m rigid vehicle is able to park.

The SGN operational land is a secured area that is not to be used by anyone except for SGN and fire services. This area is accessed via key-controlled gates as shown on the diagram to the right. This diagram also shows the amendments that have been made to the SGN operational land enclosure fencing in order to accommodate the development. SGN have been involved throughout the design process to ensure that their operational needs are met.



- - Existing SGN Operational Area Fence + Gates

Proposed SGN Operational Area Fence + Gates

····· Proposed SGN Operational Area Gates

Proposed SGN Operational Area

→ SGN Operational Area + Fire Service Access Road



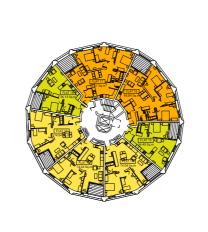


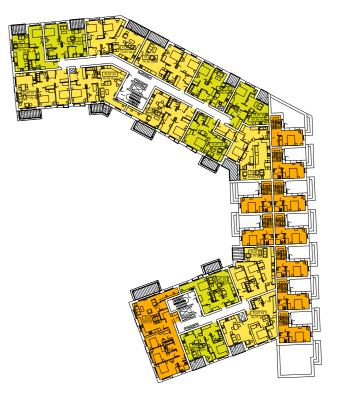












Level 1 Plan Level 2 Plan

1 Bed 2 Bed 3 Bed