

ABERDEEN CITY COUNCIL  
Balnagask, Aberdeen

Pre Feasibility Report

June 2024



## Brief and purpose of report

AtkinsRéalis have undertaken an Architectural pre feasibility report looking at the number of new build units that can be created at the Balnagask estate if the existing properties were cleared, whilst retaining the same road network. This is to achieve a high level plan only and convey the number of units and gifa.

We understand that the report shall form part of a chapter of a wider report looking at options around refurbishment first and foremost, which is covered by other consultants.

As this is high level, a number of assumptions around ground conditions, utilities, levels, and constraints have been made, and investigation into these does not form part of the exercise.

For the purpose of this report we have to focus on the whole estate and make the assumption that all properties have been brought under Council ownership.

Brief provided :

1. Mix mainly 1-bedroom properties with 10-15% being 3 or 4 bed terraced/ semi- detached properties.
2. 15% should be wheelchair accessible as per the regulations.
3. EV charging will require to be introduced in line with ACC Policy.
4. The current road layout should remain, and units located within the current development form.
5. Densities in line with ACC Planning Policy.
6. AHP are bring the district heating system to edge of the site and connections will be made to this.

1960's



Today



## Existing housing estate

### History - extract from Wikipedia

*In the 1960s [Aberdeen City Council](#) gave the go ahead for a large housing estate to be built at Balnagask. The new estate began to swallow up acres of land on the southern slopes of Torry Hill as the new cuboid shaped houses enveloped the elegant villas of Balnagask. The box shaped homes (affectionately referred to by residents as 'The Hen Hooses') differed wildly from the regimented ideas of past town planners. The first phase of the housing scheme was completed in 1967 and the second phase in 1969*

### Current sense of PLACE

The Balnagask housing estate is a mix of lower height flatted accommodation, and terrace housing, accessed by way of streets and inaccessible lanes running perpendicular to the significant fall across the site, and stepped lanes running along the fall, this creates a dense building pattern, and complex routes, poor accessibility, and ill defined public and private areas.

There is as a consequence a poor sense of security and ownership across the estate.

The current estate, over a 11.6Ha accommodates @ 500 homes, at a density of approximately 43 units per Ha.

Location – and local development plan



**Aberdeen Local Development Plan 2023**

City Wide Proposal Map  
Scale 1:22,500

**Natural Environment**

- Greenbelt (NE1)
- Green Space Network (NE2)
- Urban Green Space (NE2)

**Housing**

- Residential Areas (H1)
- Mixed Use Areas (H2)
- Land Release Policy (LR1)

**Community Facilities**

- Existing Community Sites & Facilities (CF1)
- New Community Sites & Facilities (CF2)

**Economic Development**

- Business & Industry (B1)
- Business Zones (B2)
- Aberdeen Airport (B3)
- Aberdeen Harbour (B4)
- Energy Transition Zone (B5)

**Retailing**

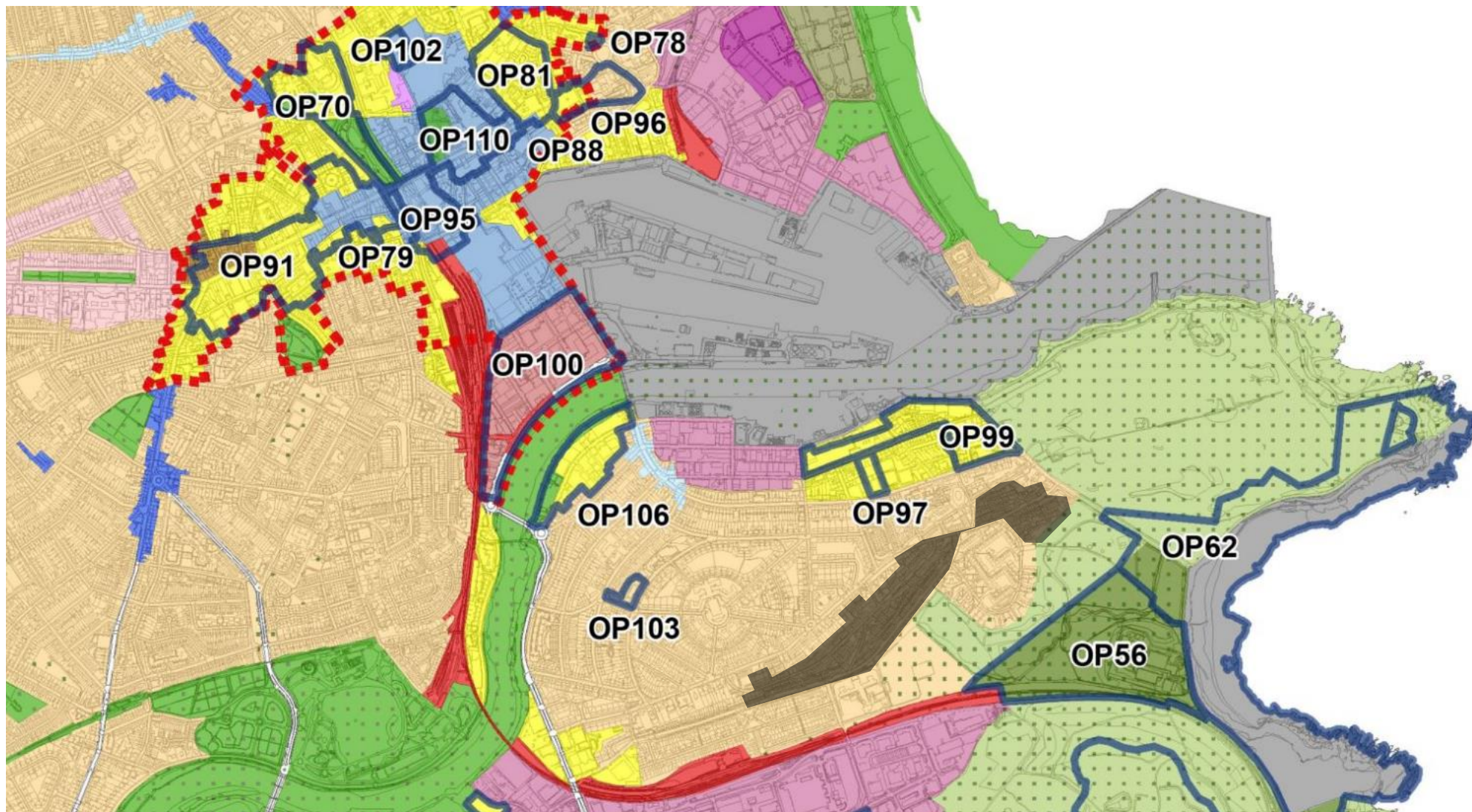
- City Centre Retail Core (VC4)
- West End Area (VC8)
- West End Shops & Cafes (VC7)
- Town Centres (VC8)
- District Centres (VC8)
- Neighbourhood Centres (VC8)
- Commercial Centres (VC8)
- Beach & Leisure (VC11)

**Transport**

- Land for Transport (T1)
- Airport Public Safety Zone

**Others**

- Opportunity Sites
- City Centre Boundary
- City Boundary



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## Location – and local development plan



### Aberdeen Local Development Plan 2023

Additional City Wide Constraints Map

Scale 1:22,500

#### Natural Environment

- Local Nature Conservation Sites
- Sites of Special Scientific Interest
- Local Nature Reserves
- River Dee Special Area of Conservation
- Undeveloped Coastal Management Area
- Developed Coastal Management Area



#### Economic Development

- Pipelines
- Pipeline Notification Areas: Outer Zone
- Mid Zone
- Inner Zone



#### Transport

- Harbour Port Boundary



#### Heritage

- Conservation Areas



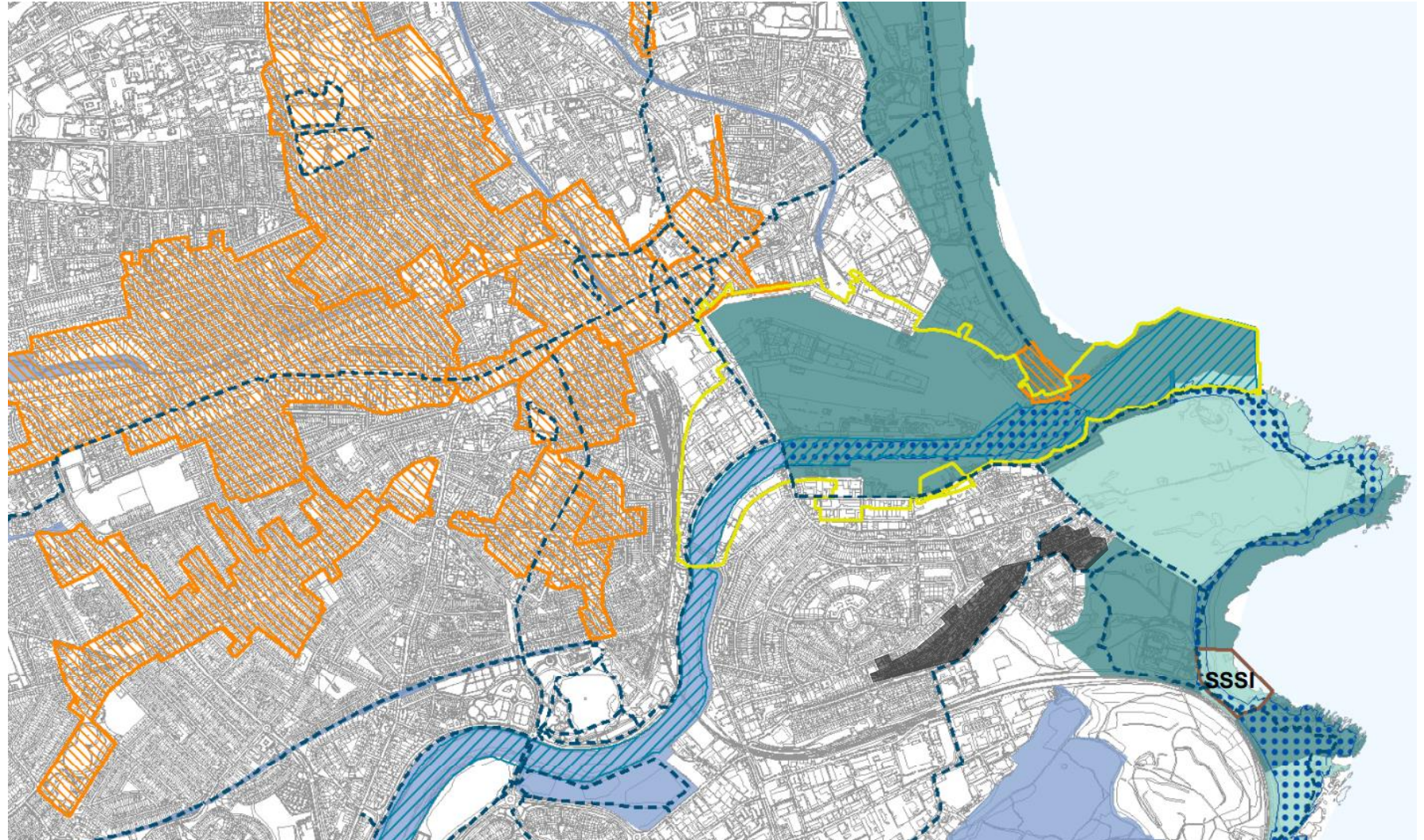
#### Other

- Core Paths
- Aspirational Core Paths
- City Boundary

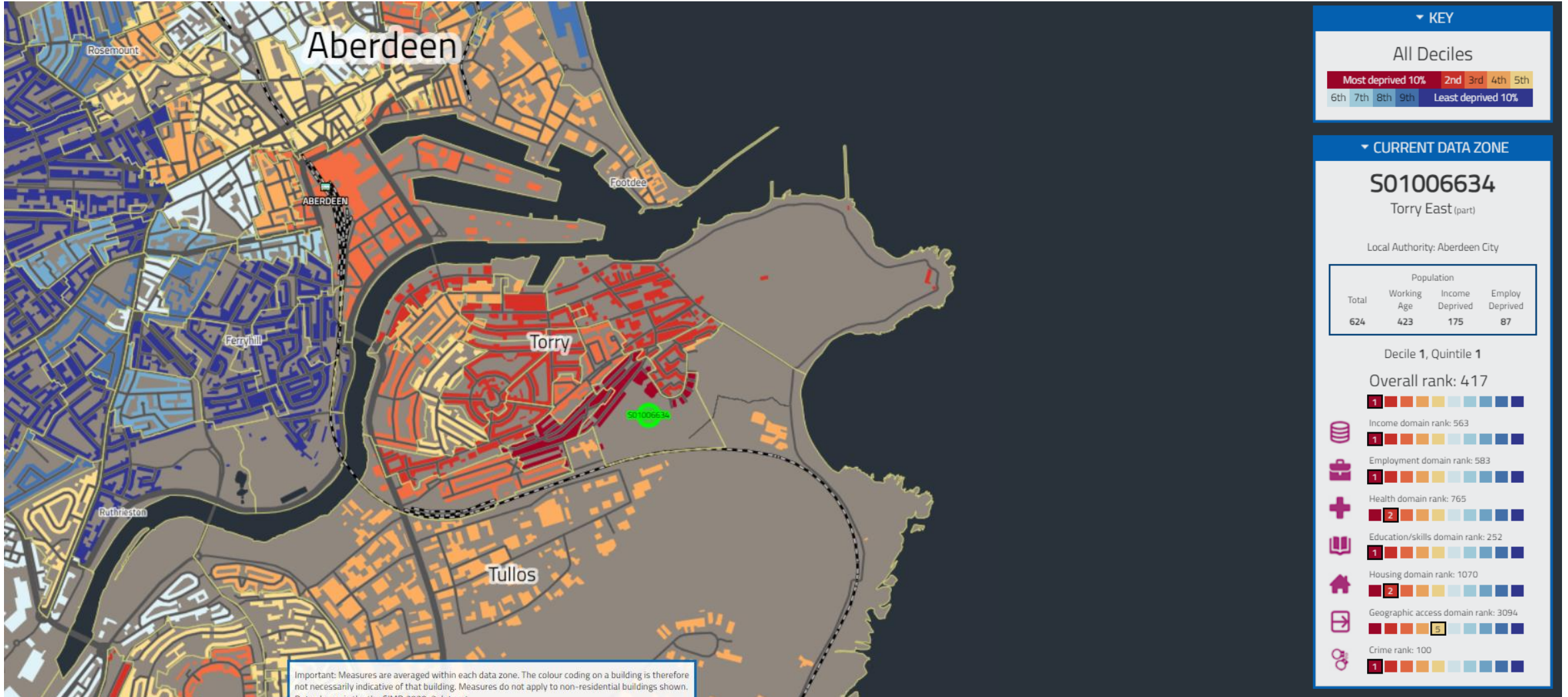


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## Location – and social measure



## Location – and surrounding context



MOVEMENT	Select one option for each theme		
How will the proposal influence <b>Movement</b> in and around its location?	Moving Around →	Public Transport 🚊	Traffic and Parking P
The proposal makes a considerable positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The proposal makes a positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Change to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SPACE	Select one option for each theme		
How will the proposal influence <b>Spaces</b> in and around its location?	Streets and Spaces 📍	Natural Space 🌿	Play and Recreation 🎮
The proposal makes a considerable positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The proposal makes a positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Change to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

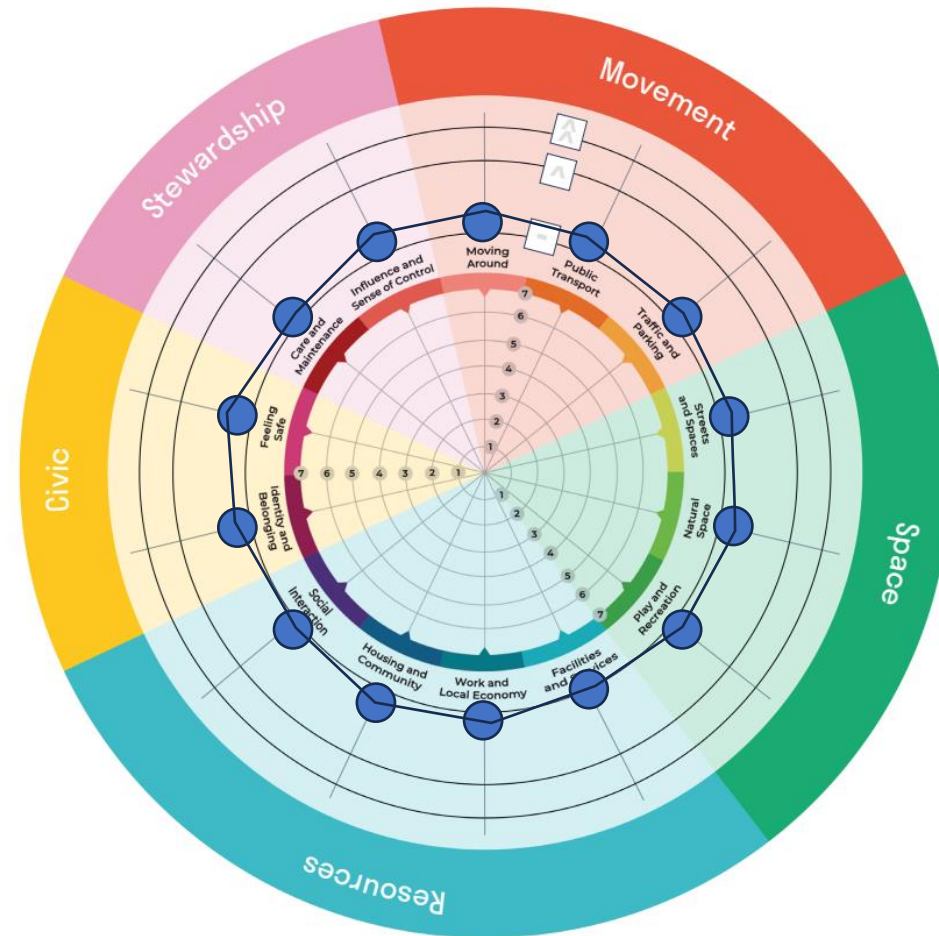
RESOURCES	Select one option for each theme			
How will the proposal influence <b>Resources</b> in and around its location?	Facilities and Services +	Work and Economy 🏢	Housing and Community 🏠	Social Interactions 👤
The proposal makes a considerable positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The proposal makes a positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Change to this theme.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CIVIC	Select one option for each theme	
How will the proposal influence <b>Civic life</b> in and around its location?	Identity and Belonging ❤️	Feeling Safe 🛡️
The proposal makes a considerable positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>
The proposal makes a positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>
No Change to this theme.	<input type="checkbox"/>	<input type="checkbox"/>

STEWARDSHIP	Select one option for each theme	
How will the proposal influence <b>Stewardship</b> in and around its location?	Care and Maintenance ⚙️	Influence and Control 🗣️
The proposal makes a considerable positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>
The proposal makes a positive contribution to this theme.	<input type="checkbox"/>	<input type="checkbox"/>
No Change to this theme.	<input type="checkbox"/>	<input type="checkbox"/>

## Retrofit scheme

Focussing on the immediate RAAC issues, and/or extending the investment to the upgrade to address improved thermal performance only. Inherent 'PLACE' issues are not addressed - ill defined streets, and public routes. Poor passive security, accessibility and cohesiveness



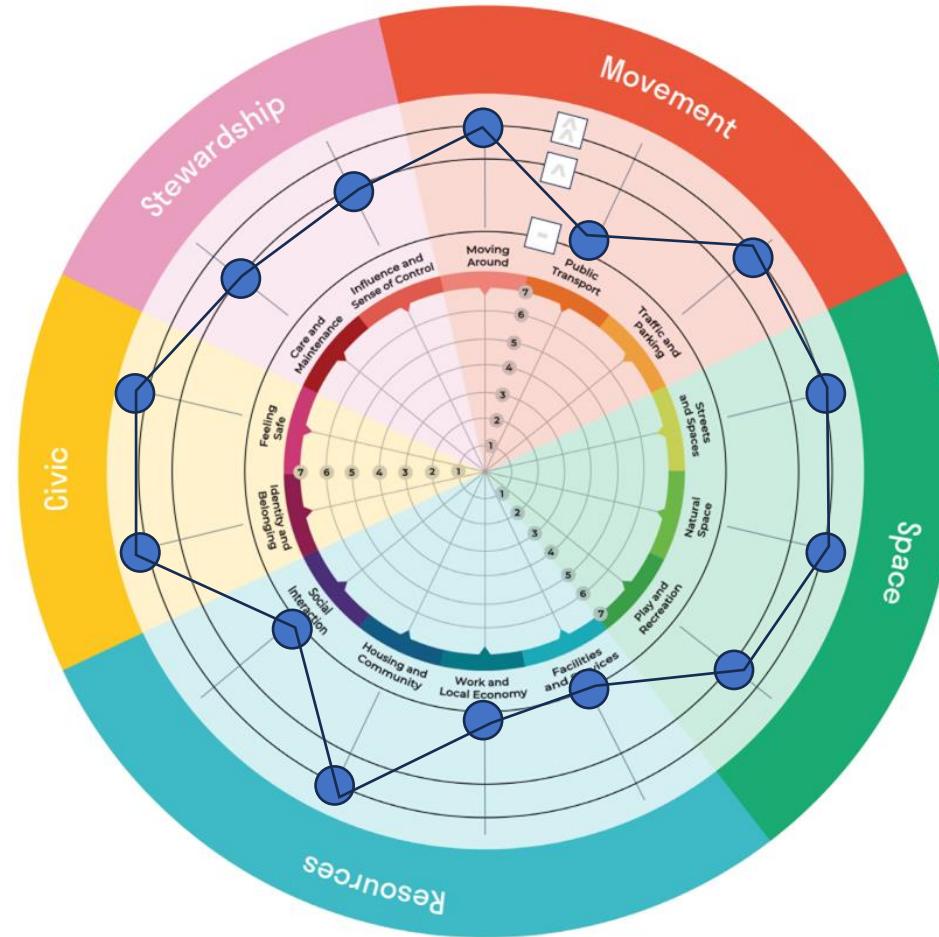


<p><b>MOVEMENT</b> <small>Select one option for each theme</small></p> <p>How will the proposal influence <b>Movement</b> in and around its location?</p> <p>The proposal makes a considerable positive contribution to this theme.</p> <p>The proposal makes a positive contribution to this theme.</p> <p>No Change to this theme.</p>	<p>Moving Around </p> <p>Public Transport </p> <p>Traffic and Parking </p>
<p><b>SPACE</b> <small>Select one option for each theme</small></p> <p>How will the proposal influence <b>Spaces</b> in and around its location?</p> <p>The proposal makes a considerable positive contribution to this theme.</p> <p>The proposal makes a positive contribution to this theme.</p> <p>No Change to this theme.</p>	<p>Streets and Spaces </p> <p>Natural Space </p> <p>Play and Recreation </p>
<p><b>RESOURCES</b> <small>Select one option for each theme</small></p> <p>How will the proposal influence <b>Resources</b> in and around its location?</p> <p>The proposal makes a considerable positive contribution to this theme.</p> <p>The proposal makes a positive contribution to this theme.</p> <p>No Change to this theme.</p>	<p>Facilities and Services </p> <p>Work and Economy </p> <p>Housing and Community </p> <p>Social Interactions </p>
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<p><b>STEWARDSHIP</b> <small>Select one option for each theme</small></p> <p>How will the proposal influence <b>Stewardship</b> in and around its location?</p> <p>The proposal makes a considerable positive contribution to this theme.</p> <p>The proposal makes a positive contribution to this theme.</p> <p>No Change to this theme.</p>	<p>Care and Maintenance </p> <p>Influence and Control </p>

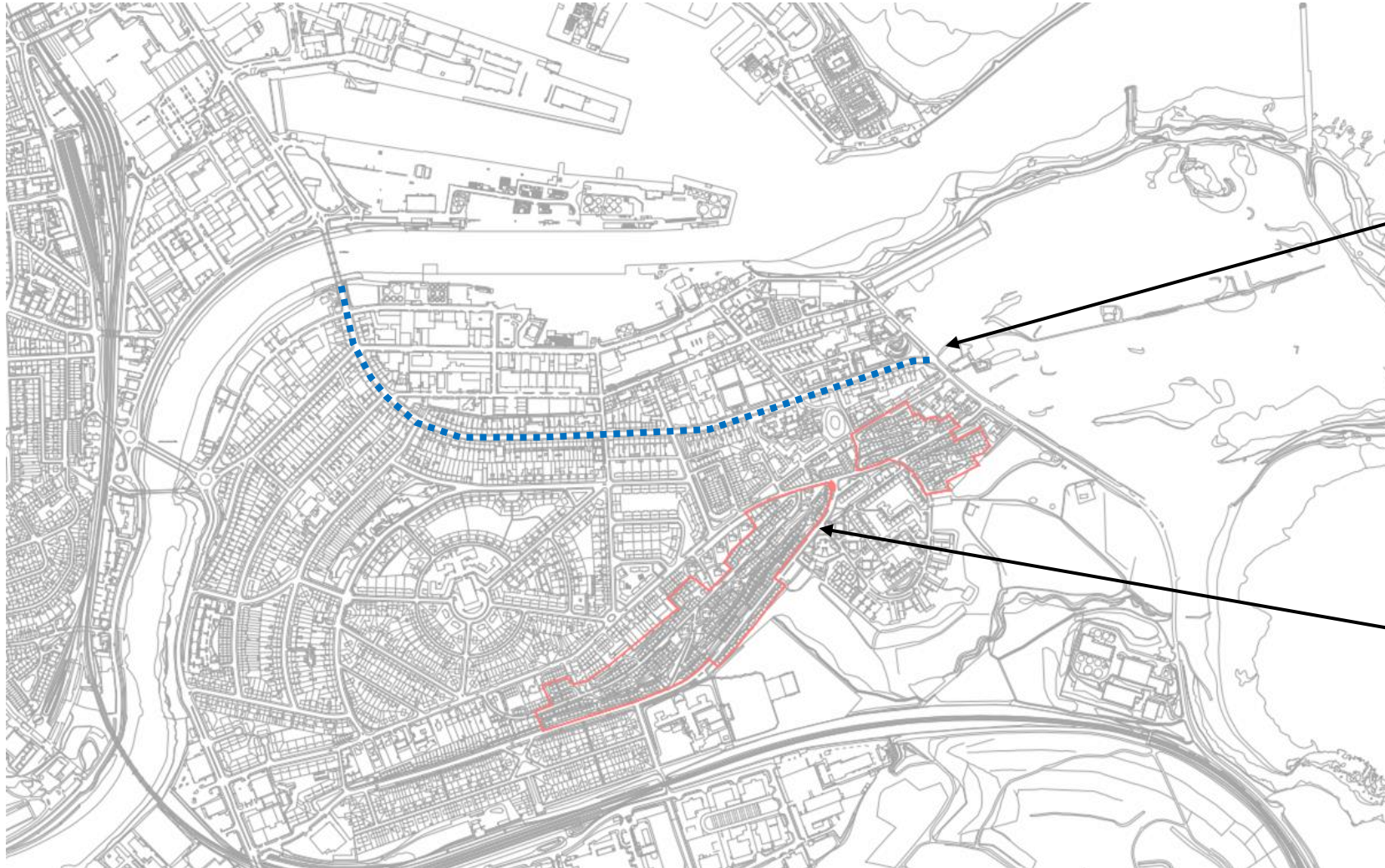
## Replacement new build scheme

Demolishing the existing properties, retaining the same road network, and creating new properties in new formats performing to a high standard in terms of hfvn's, thermal, and longevity.

Inherent 'PLACE' issues addressed – creating defined streets, and public routes, with good passive security, accessibility and cohesiveness



## An opportunity to address inherent issues – creating defined and safe streets



## An opportunity to address inherent issues – creating defined and safe streets - examples



**Defined streets, and public routes**  
**With good passive security, accessibility and cohesiveness**

**1 bed flatted accommodation consolidated into larger and taller blocks**



**Defined streets, and public routes**  
**With good passive security, accessibility and cohesiveness**

**3/4 bed accommodation consolidated into terraces**

## An opportunity to address inherent issues – creating amenity, resilience, and integrating cars - examples



Green space, suds and swails, car parking, ev charging, play space and allotments

## An opportunity to address inherent issues – creating defined and safe streets – Aberdeen examples



**Kincorth – Aberdeen City Council**

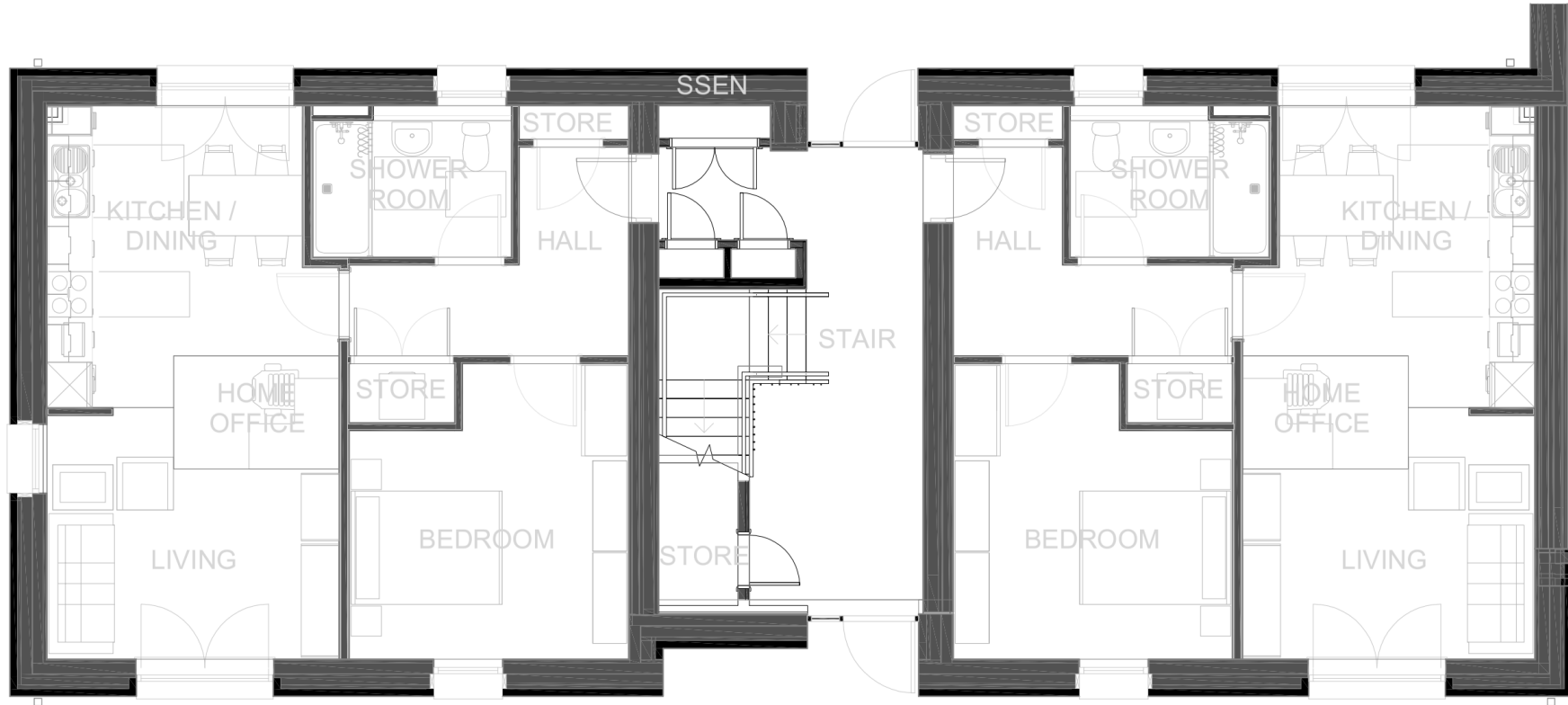


**Summerhill – Aberdeen City Council**



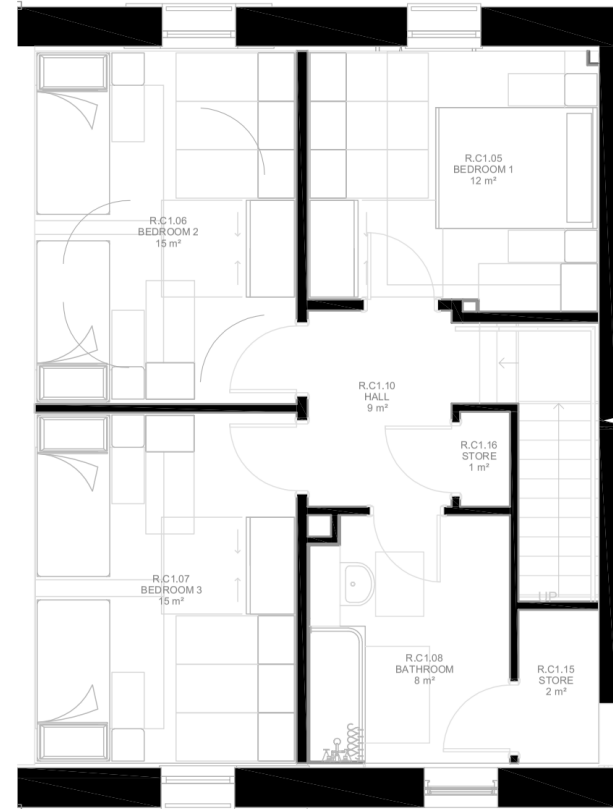
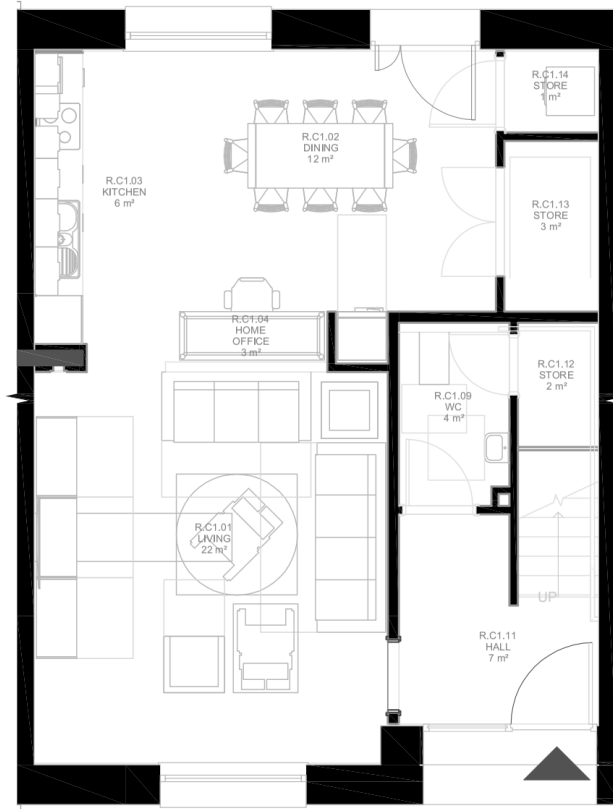
**Tillydrone – Aberdeen City Council**

## Home plans

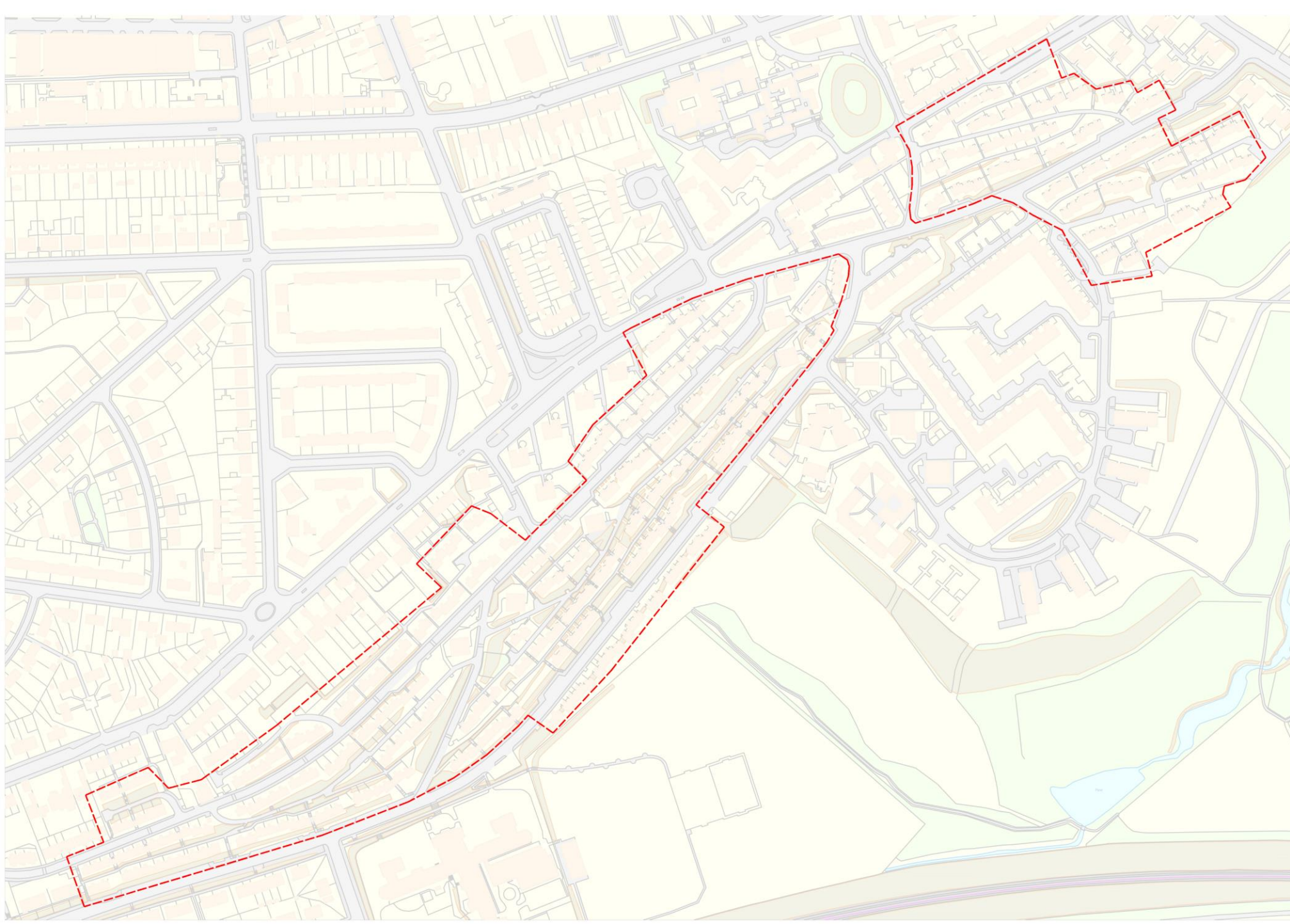


**1 bed flatted accommodation**  
**Area : 56m2 per flat excl close**

## Home plans



**3/4 bed terraced accommodation**  
**Area : 122m2**



## Existing site

Site Area: Circa 11.5 Hectares





## Replacement

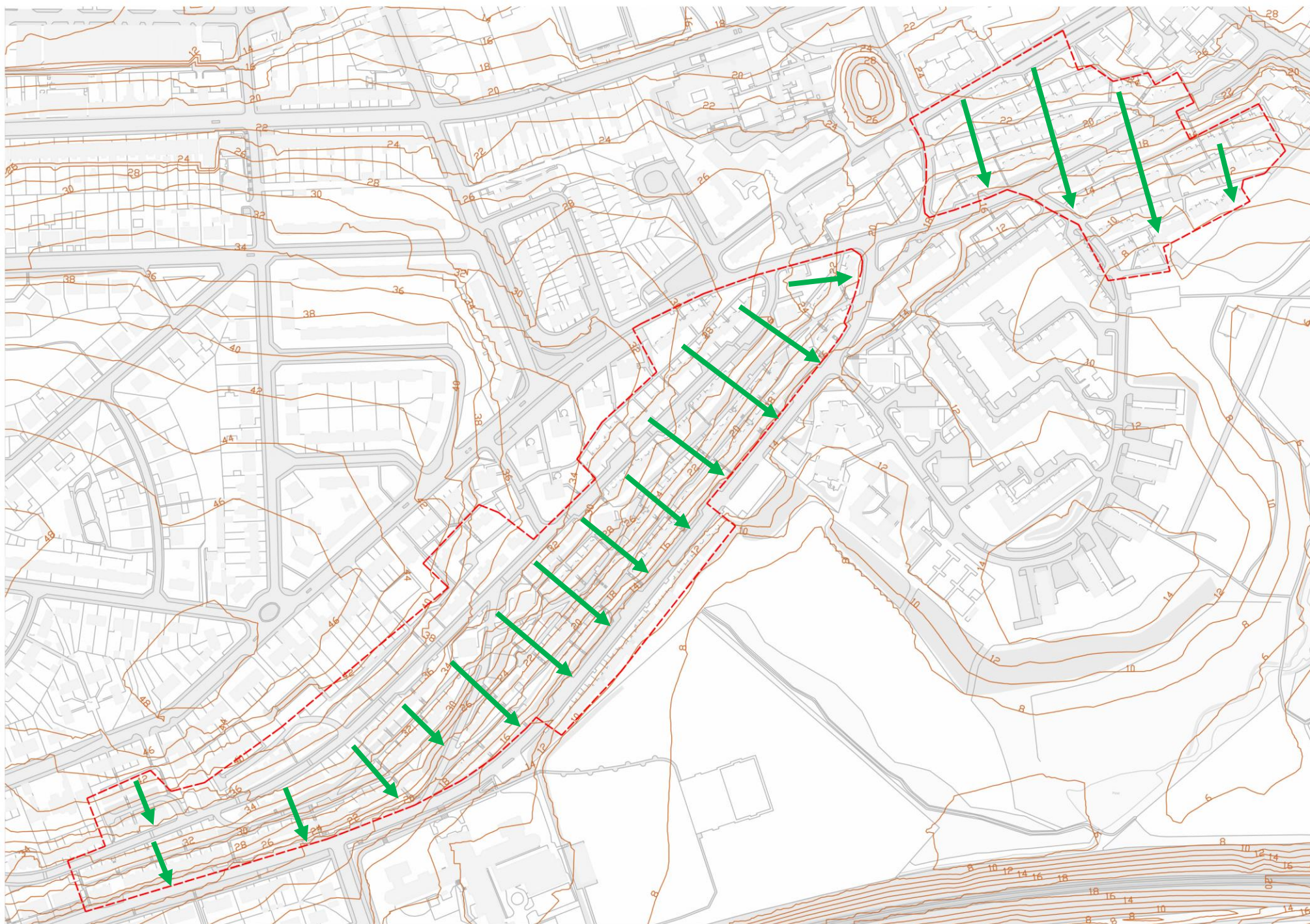
- KEY:**
- Denotes replacement
  - To be retained

Equates to the 504 addresses over 372 buildings.

138 Private

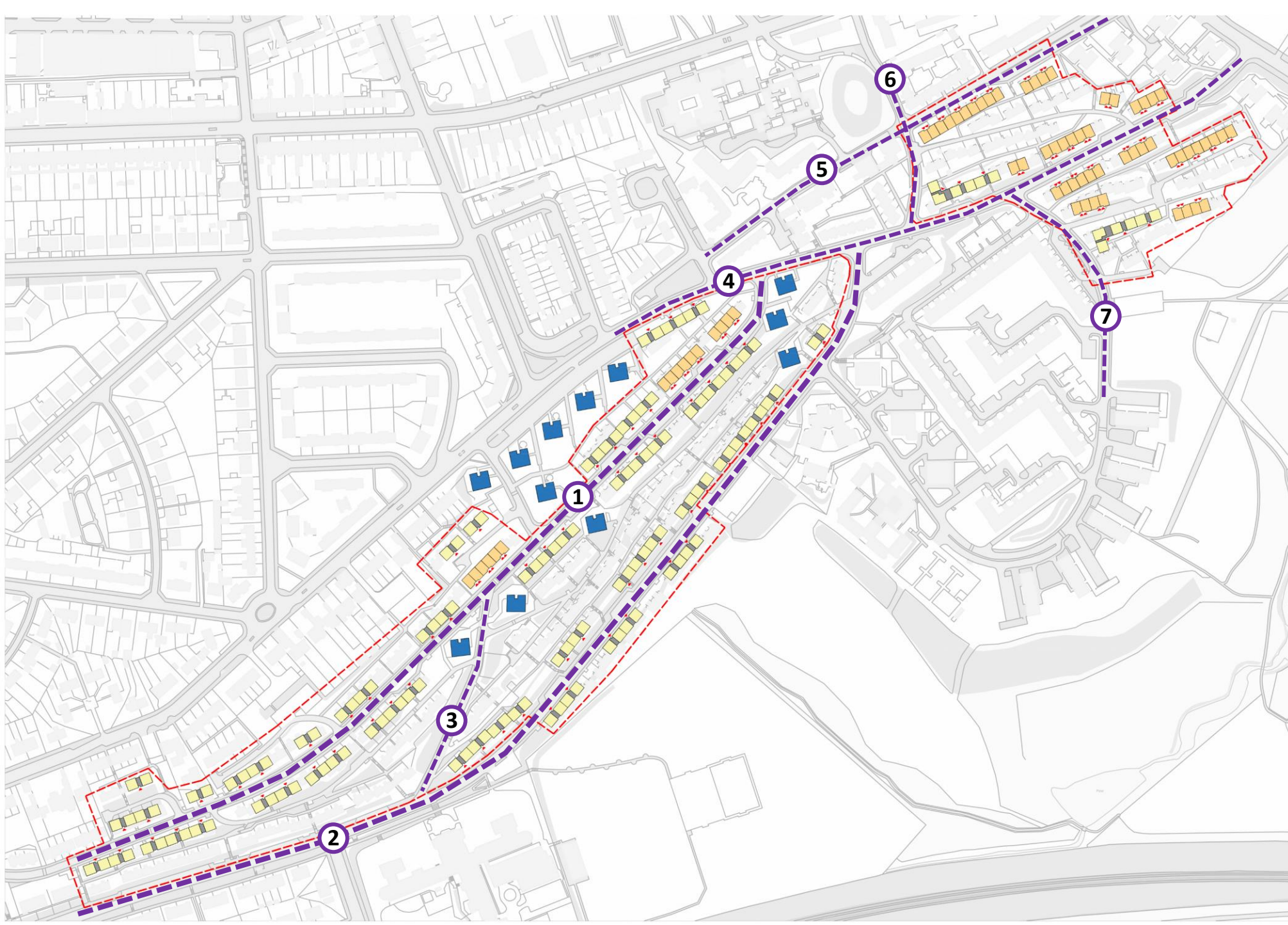
366 Council

# Topography



## Development platforms

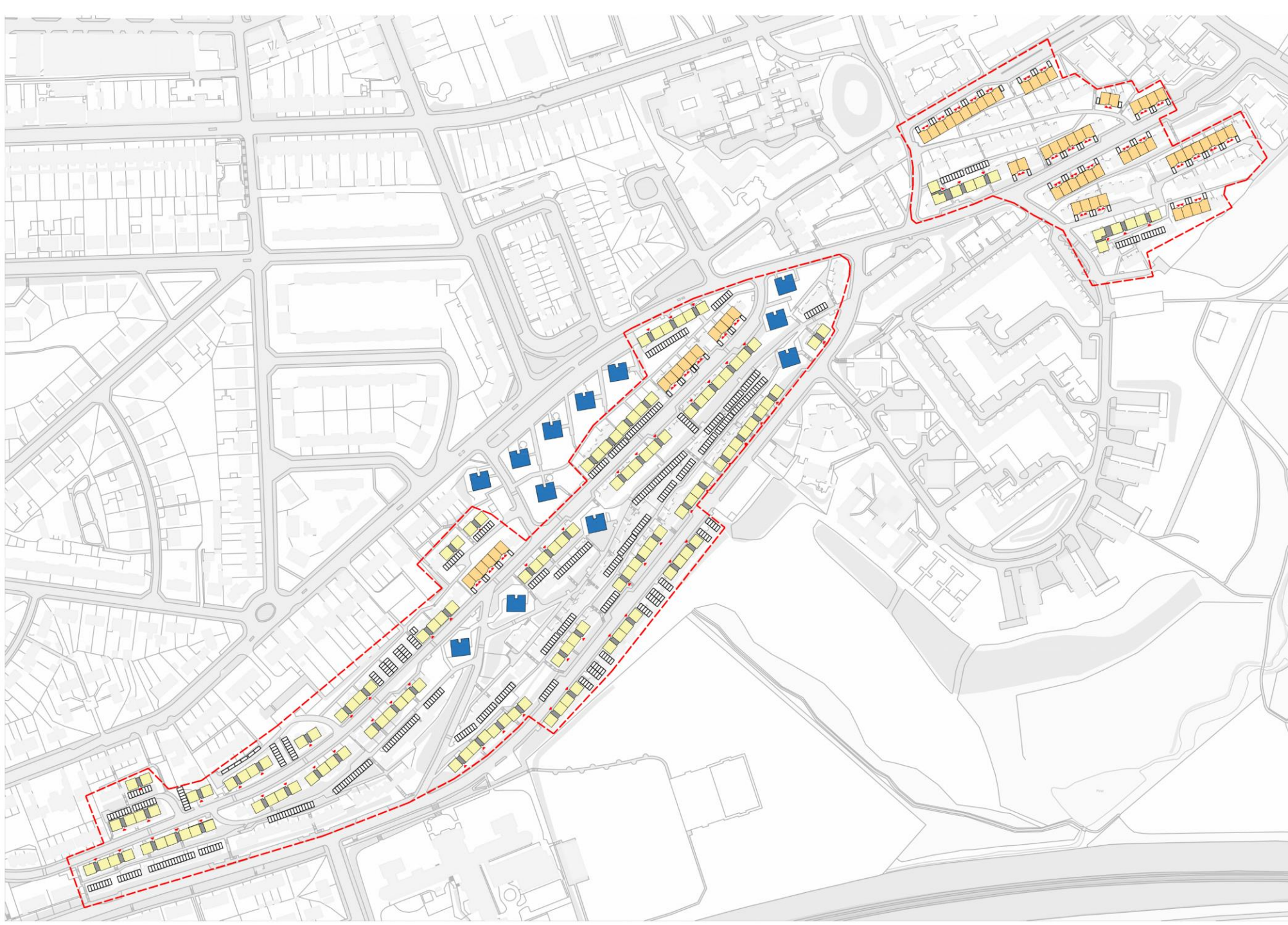




## Defining street edge




1. Farquhar Road
2. Girdleness Road
3. Rockall Road
4. Balnagask Road
5. North Balnagask Road
6. Baxter Place
7. Balnagask Circle

# Parking



## Green & Blue Infrastructure

### KEY:

-  Denotes site for local amenity shop/community centre circa 100m<sup>2</sup>
-  Suds ponds
-  Childrens play park





## Site layout

**Site area circa 11.5 Hectares**

- Unit numbers : 630**
- 560 no. 1 beds (89%)
  - 70 no. 3 bed terrace (11%)

**Units per Ha : 55**

- Car parking numbers: 630\***
- 504 Residence parking (80%)
  - 126 Visitor parking (20%)

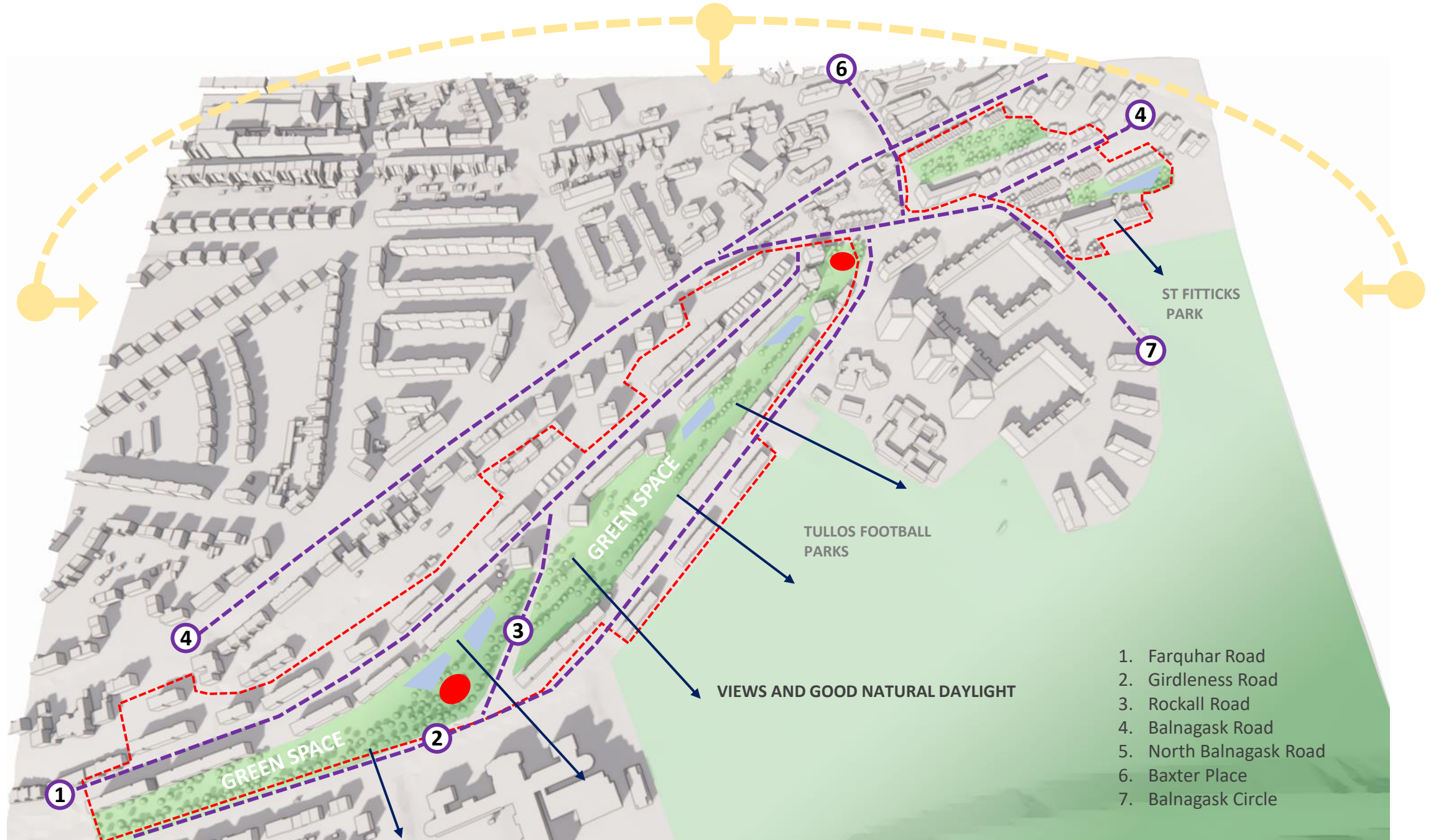
\*Note EV charging and cycle parking to meet ACC requirements

### GIFA

1 bed flats	38,080m <sup>2</sup>
Terrace housing	8,540m <sup>2</sup>
Community centre / Shops	200m <sup>2</sup>
<b>Total GIFA</b>	<b>46,820m<sup>2</sup></b>



SOUTH ASPECT ALLOWING GOOD SOLAR GAIN







Scotland 2045

Our Fourth National  
Planning Framework



Scottish Government  
Riaghaltas na h-Alba  
gov.scot



## Alignment to National Framework 4 planning guidance

- Support the principle of 20 minute neighbourhoods.
- Provide quality homes.
- Proposals should be in sustainable locations and consider brownfield regeneration
- Reduce the need to travel by discouraging applications for significant travel generating uses at locations which rely on private car usage.
- Proposals should be designed to connect with existing or future heat networks.
- Play and sport assets to be safeguarded and seek opportunities for enhancement.
- Design-in new opportunities for play in the built environment.
- Build in resilience to future climate change, including flooding
- Proposals must use blue and green infrastructure where practicable for drainage of surface water.
- Create healthier places.
- Local food growing is encouraged
- Requiring all developments to contribute to nature recovery and biodiversity improvement



## Alignment to 20 minute Neighbourhood guidance

The redevelopment allows the opportunity to embrace 20 minute neighbourhood guidance, with the ability to access everyday services and amenities through active travel, whether by walking, wheeling or cycling. Creating and maintaining a place that helps people to live locally more of the time replace the need for frequent short journeys in private vehicles.

A successful place is one in which people can choose to live their whole lives because the needs of all age groups and life stages are accommodated. Enabling people to age in place helps create strong communities. The redevelopment allows for new homes of varying sizes, including housing for older people, dementia-friendly homes, as well as homes for families.

Access to green space within a local area or neighbourhood shall be at the heart of the community with easy access to good quality green spaces that offer a variety of landscapes and activities, including play

Creating retail and service destinations helps to reduce travel distances, as services and amenities remain available locally within walking, wheeling or cycling distance from people's homes

20-minute neighbourhoods can also support small independent businesses and retailers that are community led – ventures that are central to local communities can be explored and space provided around / as part of the service destinations

Housing designs shall consider climate resilience, with access to shared or private green spaces, and shall incorporate secure and convenient on-site or off-site cycle storage

Guidance noted in policy	Guidance adopted into the new development
<p>Policy H3: Density, requires that all housing developments larger than 1 hectare achieve a net density of no less than 50 dwellings per hectare. The planning for this should take into consideration the sites characteristics and the surrounding area. Higher densities may be appropriate in central locations whereas lower densities may be more appropriate in other areas of a development providing the overall site meets the minimum requirement</p>	<p>The proposed development has a density of above 50 units per Ha, and is overall sitting at : 55 units per Ha</p> <p>The size of the development, would benefit from retail/community space and space is proposed within the development over and above the residential accommodation at 2 focussed areas to the heart of the development.</p>
<p>Good, careful design at the outset will minimise the total energy demand for the lifetime of a development. Natural light is important to amenity as it ensures a pleasant and healthy place. In the initial design stages, consideration should be given to the orientation of the proposal so that it can benefit from the most natural light. Natural light is also beneficial in reducing energy demand by providing passive heating and lighting for the lifetime of the development</p>	<p>The consolidation of the properties into larger flatted blocks, creates greater space between homes, and greater access to views and daylight from the south, achieving the benefits noted in this policy guidance</p>
<p>Development layout design should maximise the potential for passive solar gain with public rooms facing south, or within 30 degrees of south. Where possible development should also maximise the use of south facing slopes to make use of solar gain</p>	<p>The development shall maximise the use of the south facing slopes to make use of solar gain, and provide roofscape that can support PV's. The residential accommodation shall be through and through units, so public rooms can face south.</p>
<p>A heat map has been prepared for Aberdeen City to identify the potential links in the network that could be considered, and further guidance will be contained in Aberdeen Planning Guidance: Heat Networks and Energy Mapping. The use of district heating can offer a lower heat price than using individual boilers or electrical heating and by combining heat and power generation fuel can be used more efficiently. Overall, a reduction in carbon emissions can be achieved through the use of district heating</p>	<p>The development shall link into the wider district heating network already being installed in Torry, and thus achieve these benefits</p>
<p>For developments, the target is to at least meet the current Scottish building regulations' Target Emissions Rate (TER) and achieve the sustainability rating 'Gold' level for carbon dioxide reduction and energy efficiency, including through the installation of low and zero carbon generating technologies</p>	<p>We would recommend the new properties achieve this level of performance for carbon dioxide reduction and energy efficiency</p>



## Alignment to Secured by Design Principles

Secured by Design is a police initiative to guide and encourage those engaged within the specification, design and build of new homes, and those undertaking major or minor property refurbishment, to adopt crime prevention measures

Scottish Planning Policy's (SPP) Planning Policy Note 77 (PAN 77) highlights the positive role that planning can play in helping to create attractive well-managed environments which discourage antisocial and criminal behaviour. It comments that new development should be located and designed in such a way as to deter such behaviour and acknowledges that poorly designed surroundings can create feelings of hostility, anonymity and alienation which can have significant social, economic and environmental costs leading to environments that are desolate.

Key layout principles alignment :

- Vehicular and pedestrian routes should be designed to ensure that they are visually open, direct, well used and should not undermine the defensible space of neighbourhoods
- Neighbourhoods with smaller number of streets or fewer entrance streets or with more turnings have lower property crime rates
- Routes for pedestrians, cyclists and vehicles should be integrated and assist easy, intuitive wayfinding through the application of inclusive design by increasing activity and therefore natural surveillance, proven deterrents for crime and anti-social behaviour
- Facilities should be designed to allow natural surveillance from nearby dwellings with safe and accessible routes for users to come and go.
- The provision of inclusively designed public open amenity space, as an integral part of residential developments, should make a valuable contribution towards the quality of the development
- Vulnerable areas, such as exposed side and rear gardens, need more robust defensive barriers by using walls or fencing to a minimum height of 1.8m
- Where communal parking areas are necessary, bays should be sited in small groups, close and adjacent to homes, be within view of active rooms

