

# appendices



# -A

## appendix A

# public open space provision - calculations

### Summary

The calculations below have been prepared to substantiate the requirements for Open Space provision within the PPIp proposals and of the adjoining Pentland Residential Park. It has been necessary to include PPML's adjoining ownership, as the two sites can be read as one in terms of this PPIp, as residents of Pentland Residential Park will have access to the proposed open space.

Calculations have used the requirements for new public open space provision as required by Midlothian Council's LDP Policy, Dev 9, at Appendix Table 4.1. The LDP provisions are in turn based on those embodied in Fields in Trust (FIT) (Scotland, 2020) recommendations.

The calculations consequently are tabulated, as follows:

Table 1 - FIT POS requirements - based primarily on population (residential, not commercial), but also on site area;

Table 2- Population calculation for the residential components of proposal (used as basis for some POS provisions (via FIT recommendations)

Table 3 - Provision of POS within the Indicative Masterplan and any over provision relative to FIT requirements.

Table 4 - The POS requirements for New Pentland PPIp and Pentland Residential Park combined with actual provision on both sites.

To assess what level provision that Pentland Residential Park should have, we used the FIT calculations to calculate the overall requirements based on resident population, The actual

population of Pentland Residential park is actually 262 living in 195 units. For the purposes of this exercise, however, we based the requirement calculation on a resident population of 400 presuming a 2 person occupancy in each of the 200 (or so) units (this includes a percentage for children, but considers that site is dominated by an older demographic).

• Play areas -	0.10ha
• Amenity green space -	0.24ha
• Parks and gardens -	0.32ha
• Natural and semi natural -	0.72ha

Pentland Residential Park requirement (Table 4) 1.38ha

PPIp requirement (table 4)

• Total existing provision on Pentland Residential Park - see Figure75	0.747ha
--	---------

**TOTAL requirement (policy) on both sites: 2.127ha**

The actual open space provision within the proposals, based on a resident population of 216 (see Figure 76 and Tables 1 and 2) is:

• Play areas -	0.04ha
• Amenity green space -	0.921ha
• Parks and gardens -	0.402ha
• Natural and semi natural -	0.40ha

PPIp provision 1.763ha

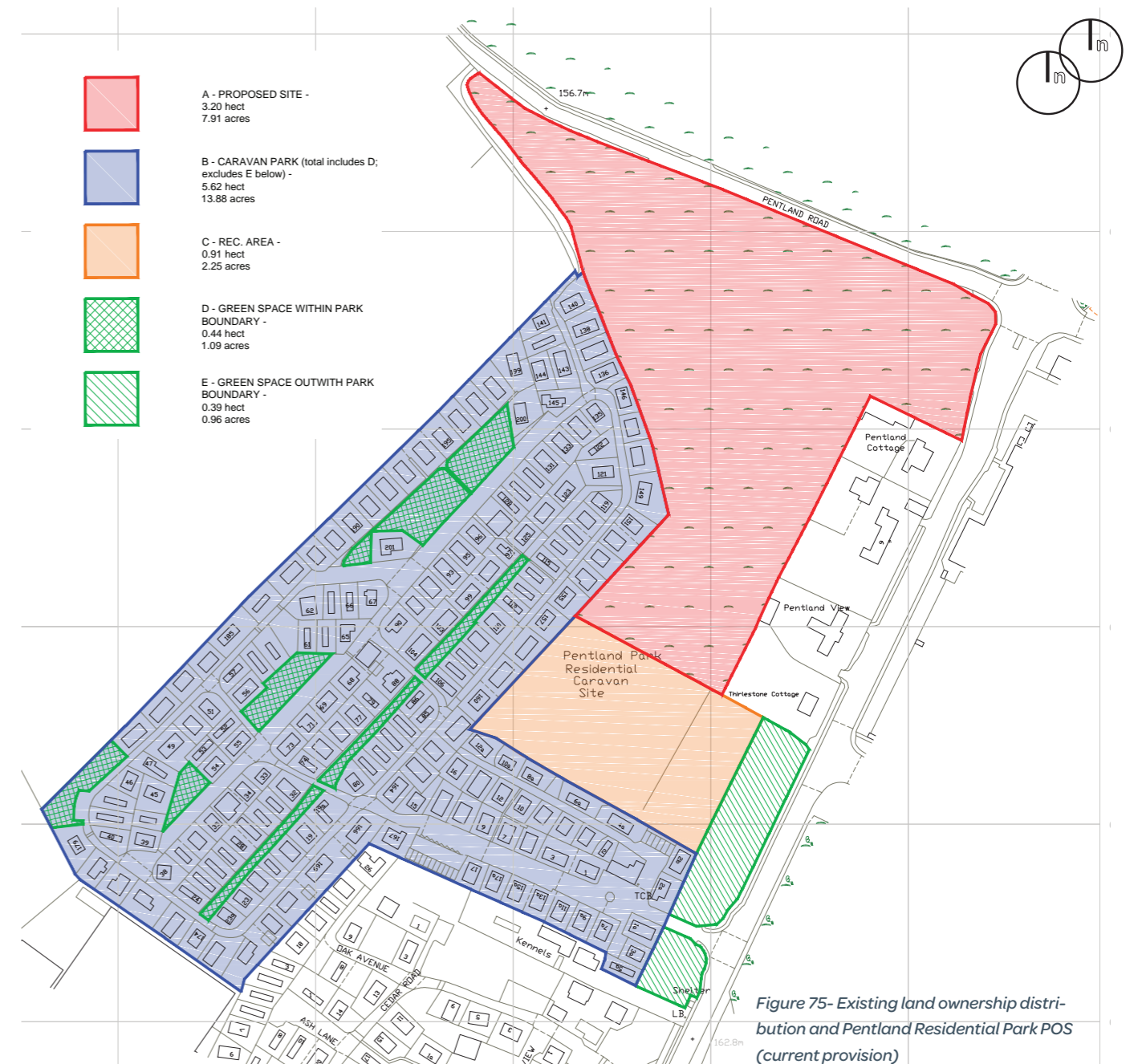


Figure 75- Existing land ownership distribution and Pentland Residential Park POS (current provision)

• Total existing provision on Pentland Residential Park - see Figure 75	0.44ha
<b>TOTAL provision (actual) on both sites:</b>	<b>2.203ha</b>

Therefore there is an over provision - the difference between the 2.203ha (actual) and the 2.127 ha (requirement/policy - FIT) of 0.076ha (760m2).

Thus the indicative masterplan proposals can cater for both open space provisions - that of the existing Pentland Residential Park and that proposed for New Pentland.

The question of qualitative requirements set out in MLC Appendix 4 is an important one. We hope that the Design principles and framework components set out in the body of the DAS, give a sufficient idea of the intentions of the client to comply with these qualitative aspects. However, it will be the role of future Detailed Planning Applications to ensure that these qualitative requirements are finally ensured.

# -A<sub>1</sub>

## public open space provision - masterplan framework proposals

**TABLE 1**  
Public Open Space (POS)/ Green Space Provision within Masterplan Framework  
Utilising categories from Fields In Trust (FIT - formerly NPFA) guidelines (Scotland) - November 2020.

Area (See Figure 76)	Informal Outdoor Space categories			Totals (ha.)	Description
	Amenity Green Space (ha.)	Parks and Gardens (ha.)	Natural and Semi - Natural (ha.)		
1			0.40	0.40	SUDS detention pond and planting
2	0.255			0.255	Western buffer planting
3	0.175			0.175	Western buffer planting
4		0.442		0.442	Central open space - including 400m2 of Play Area (LAP)
5	0.032			0.032	Connection pathway space
6	0.047			0.047	Eastern Edge planting to rear wall of properties on A701
7	0.126			0.126	Exiting Tree belt zone
8	0.040			0.040	A701 Edge - existing hedge zone
9	0.077			0.077	Southern entrance arrival landscape
10	0.075			0.075	Southern boundary planting zone
11	0.023			0.023	Street trees
12	0.094			0.094	Spine Road and main access
<b>Totals</b>	<b>0.921</b>	<b>0.442</b>	<b>0.40</b>	<b>1.763</b>	



Figure 76 - Landscape Framework key plan

# -A<sub>2</sub>

## public open space provision -- masterplan framework proposals

**TABLE 2**  
Public Open Space (POS)/ Green Space Provision within Masterplan Framework - **RESIDENT POPULATION CALCULATIONS**

Plot types and Resident Population generator	Type	Number of units	Adults per unit	Children per unit	Total per unit	Sub totals	Total Resident Population	Comments
Commercial plot zones	-	N/A	0	0	0	0	0	The 2 northern sectors (Aldi in NE not part of this application) and NW plot - Vets. - <b>both are Non resident</b>
Housing (affordable)	2 bed	6	2	2.5	4	27	52	
	3 bed	3	2	4	6	18		
	3 bed	1	2	5	7	7		
Total Housing	0.032			0.032				<b>Used as basis for calculation of Play Provision (ie Children and families only)</b>
Retirement Units	apartments	42	2	0	2	42	84	
Care/assisted living units	bed units	80	1	0	1	80	80	
<b>TOTALS</b>							<b>216</b>	<b>Used as basis for all Informal Outdoor Space calculations</b>

\*FIT - is Fields in Trust (Scotland, 2020), which sets the current Open Space standards applicable.

And those standards are replicated in MLC's LDP Policy Dev 9 at Appendix Table 4.1

**TABLE 3**  
Public Open Space (POS)/ Green Space Provision within Masterplan Framework - **OPEN SPACE CALCULATIONS**

Based on Guidance for Outdoor Sport and Play from FIT\* (Scotland 2020)

OPEN SPACE TYPE	ha/1000 of population (FIT)	New Pentland Masterplan REQUIREMENT - Population @216	New Pentland Masterplan ACTUAL Provision - see Table 1 and Figure ???)	Measurement of over provision relative to FIR requirements	Comments
PLAY AREAS - Local Area for Play (LAP)	0.25	0.054 (540m2)	0.04 (400m2)	- 0.014	based on Family accommodation/population - @ 52 persons
AMENITY GREEN SPACE	0.6	0.130	0.921	+ 0.791	
PARKS AND GARDENS	0.8	0.173	0.402	+ 0.229	Central Open space area (0.442 less the LAP play area at 400m2).
NATURAL AND SEMI NATURAL	1.8	0.390	0.400	+0.010	
<b>TOTALS (ha.)</b>	3.45	<b>0.747</b>	<b>1.763</b>		
				<b>+1.016</b>	Total over provision - used to offset against restructured Existing POS areas associated with Pentland Park Residential park - see Table 4

**TABLE 4** Public Open Space (POS)/ Green Space Provision within Masterplan Framework - **JOINT OPEN SPACE CALCULATIONS FOR PENTLAND RESIDENTIAL PARK and NEW PENTLAND - using FIT requirements**

Based on Guidance for Outdoor Sport and Play from FIT\* (Scotland 2020)

OPEN SPACE TYPE	ha/1000 of population (FIT)	Pentland Residential Park Masterplan REQUIREMENT - Population @400 (2 persons per unit)	New Pentland Masterplan ACTUAL Provision - see Table 1 and Figure 76		Comments
PLAY AREAS - Local Area for Play (LAP)	0.25	0.10 (1000m2)	0.04 (400m2)		based on Family accommodation/population - @ 52 persons
AMENITY GREEN SPACE	0.6	0.240	0.921		
PARKS AND GARDENS	0.8	0.320	0.402		Central Open space area (0.442 less the LAP play area at 400m2).
NATURAL AND SEMI NATURAL	1.8	0.72	0.400		
<b>TOTALS (ha.)</b>	3.45	<b>1.38 (PRP)</b>	<b>1.763 (NP)</b>		<b>Totals</b>
		<b>+ 0.747 (NP)</b>			Add FIT POS Requirement from New Pentland (NP)
			<b>+0.44 (PRP)</b>		Add Actual POS currently provided at Pentland Residential Park (PRP)
		<b>2.127</b>	<b>2.203</b>		Total joint provision -
				<b>+ 0.076 (760m2)</b>	Discrepancy (+/-) in joint provision.

# -B

## appendix B illustrative character zones

In order to further understand the intentions and design responses inherent in the Indicative Masterplan we have added here some detailed explanation of the various character areas that are intended across the site..

These character areas are split into 5 areas.

- 1 North East commercial - main access/spine road
- 2 North West commercial/spine road
- 3 Central - Community hub
- 4 Central - Affordable housing
- 5 Southern - Retirement and assisted living/care units

The broad distribution of character areas is shown on Figure 54 opposite.

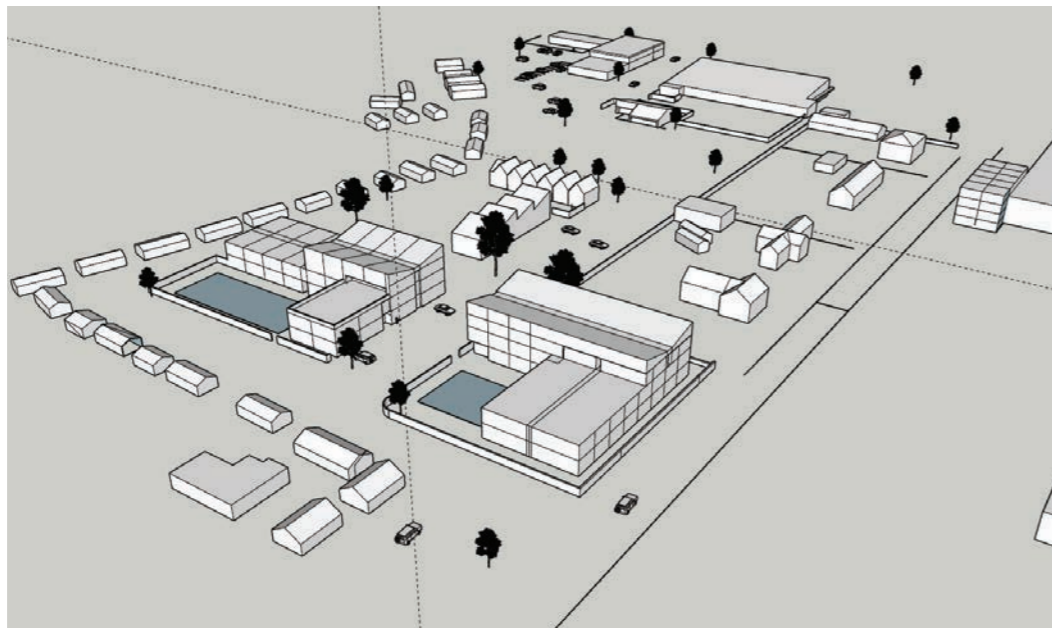


Figure 53 - Current proposals as 3D model (indicative sketchup)



Figure 54 - masterplan character zones key plan

# -B<sub>1</sub>

## northern arrival/NE commercial area (1) - ALDI

### Northern main access and arrival zone

- 1 The main masterplan site entrance off Pentland Road; widened to accommodate visibility splays and a right had turn lane; plus a 3 lane carriageway (initially).
- 2 Access road to development Plot 1.
- 3 Mini roundabout/turning area/ access point to rear service area (Plot 1); Commercial plot 2 (NW) and the Community Hub (south)
- 4 Commercial Plot 1 - 'greyed out' as not part of this PPIp application and subject to a separate Detailed planning application on behalf of Aldi plc..
- 4a Commercial Plot 1 - Service yard (allowing turning movements and circles - 'greyed out' as not part of this PPIp application and subject to a separate Detailed planning application on behalf of Aldi plc
- 5 Suggested alignment of walling (maximum height 1.8m) to screen service area.
- 6 Pedestrian crossing point.
- 7 Suggested location for a lay-by to act as drop off/pick up area for Aldi store; accompanies by;
- 8 A small plaza (with seating walls, planting and street trees (set back and into slope down from store)).
- 9 Access to Community Hub (see Character area 2 below).
- 10 Main pathway circulation - 3.0m wide.
- 11 Formal avenue tree planting - see landscape framework for details.
- 12 Ornamental shrub planting - below trees - see landscape framework for details.



Figure 55 - masterplan character area 1

# -B<sub>2</sub>

## NW commercial area (2) + SUDS

### VET OPTION - NW Commercial Development Plot

- 1 The main Veterinary building - single storey (defined by heavy red line) - initially 1000ft<sup>2</sup> (say 1000m<sup>2</sup>) - expandable to 2000m<sup>2</sup> by additions to the south and additional floors (crossed area at 1A and 1B).
- 2 Service yard with access from north west, walled/fenced and linked to
- 3 A storage area, with
- 4 Linking corridor to main building.
- 5 Enclosed courtyard area for pet exercise or a ring for large animals in Animal hospital adaptation
- 6 Car parking area - for 24 cars + 3 disabled (marked D) - in porous asphalt surfacing.
- 7 Service access road - assumed one way - leading from the main spine road, and
- 8 Exiting onto the adopted Pentland Road.
- 9 up to 12 no staff/official visitors parking - also using one way service route?
- 10 A 10.0m set back to allow for drainage runs to pass within way leave - and reinstate the lost existing Hedgerow (to accommodate new road alignments and visibility splays)?
- 11 Ambulance parking (6no).
- 12 SuDS drainage swale ditch
- 12a Rain garden and 'urban swale' as car parking surface water run off drainage.
- 13 SUDS detention pond
- 13b Drainage outfall/overflow
- 14 Timber footbridges/light vehicles over drainage ditch and pond
- 15 Footpath/cycleways
- 16 Retained native hedgerow
- 17 Existing access way reformed as footpath/cycleway entrance with Seat and litter (dog) bins
- 18 Proposed native woodland on raised embankment
- 19 Proposed native shrub buffer planting in combination with small trees (Rowan, Birch and Cherry) in combination with wild flower and long grass edges.
- 20 Formal grassland
- 21 Emergency access way into Residential park - using reinforced grass and pavement.
- 22 Formal avenue tree planting
- 23 Proposed native hedge planting (replacement)



Figure 56 - masterplan character area 2

# -B<sub>3</sub>

## central - community hub

### Central community hub and public green space.

The green hub of the development, containing:

- 1 Primary access road - terminus of main spine road - leading to;
- 2 Drop off/pick up for Community hub.
- 3 Circulation system leading to 14no car parking spaces for staff and visitors.
- 4 Community building - potentially a children's nursery/crèche (@300m<sup>2</sup>) single story building.
- 5 External plaza.
- 6 External walls - 1.6m high - to community space; part wall/railing facing POS.
- 7 Sheltered, private, play lawn.
- 8 Local area for Play (LAP), at 400m<sup>2</sup> with selection of play equipment, seating, planting and shade trees.
- 9 External wall/railings and gates.
- 10 Footpath connection to A701 and bus stop/shelter.
- 11 Main pathway circulation - 3.0m wide with controlled access.
- 12 Footpath/cycleways- 4.0m wide; with controlled access but suitable for emergency vehicles.
- 13 Central green space, suitable for small informal ball games and general play; with 'smart street lighting'.
- 14 Public Sculpture location - art work selected following an invited national symposium.
- 15 Informal tree planting - see Landscape Framework for details.
- 15a Ornamental shrub planting - see Landscape Framework for details.
- 16 Formal avenue tree planting - see Landscape Framework for details.
- 17 Public Seating of various sizes and styles.
- 18 Existing trees retained.
- 19 Emergency access way into Residential Park - using reinforced grass and pavement.
- 20 SuDS drainage swale/ditch - see Landscape Framework for details.
- 21 Formal grassland - see Landscape Framework for details.
- 22 Wild flower/long grass edges - see Landscape Framework for details.
- 22 Proposed native shrub mix - see Landscape Framework for details.
- 23 Proposed native tree planting (small to medium height) - see Landscape Framework for details.

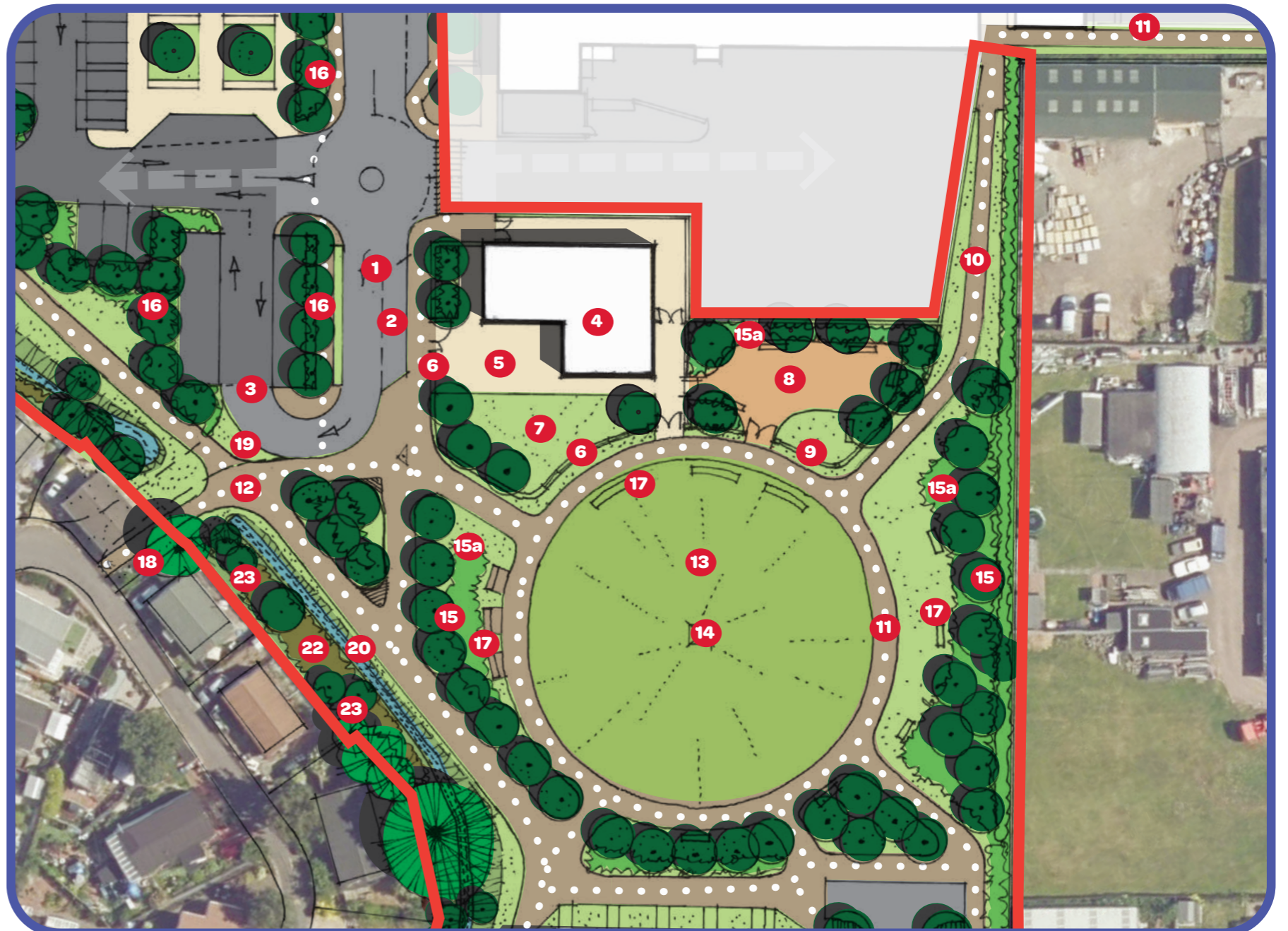


Figure 57 - masterplan character area 3



# -B<sub>4</sub>

## central - affordable residential units

### Affordable housing area

Overlooking the open space and 'the street' the affordable housing area is located centrally to help anchor the site and provide safe 'eyes on the street'. Comprising as currently envisaged:

- 1 6no. Starter homes - 2 storey @120m<sup>2</sup> GFA, with small front gardens and ;
- 2 Private gardens @100m<sup>2</sup>.
- 2a Garden walling and fencing - 1.6m high.
- 3 4no. Family unite - 2 storey (with potential for 3 floors - by convertible roof spaces); @150m<sup>2</sup> GFA, with small front gardens and;
- 4 Private gardens @130m<sup>2</sup>.
- 4a Garden walling and fencing - 1.6m high
- 5 Access road - 'the street' - 6.5m wide in porous asphalt.
- 5a Parking areas with approximately 42 spaces - in porous tarmac or permeable block paving;.
- 6 Turning head suitable for Refuse/Fire vehicles.
- 7 Crossing point in block paving.
- 8 Existing trees retained. .
- 9 Proposed informal tree planting - see landscape framework for details.
- 10 Ornamental shrub planting - see landscape framework for details
- 11 Formal grassland - see landscape framework for details
- 12 Main pathway circulation - 3.0m wide.
- 13 SuDS drainage swale ditch - see landscape framework for details.
- 14 Proposed native shrub mix - see landscape framework for details
- 15 Wild flower/long grass edges - see landscape framework for details.
- 16 Formal avenue tree planting - see landscape framework for details.
- 17 Proposed native tree planting (small to medium height) - see landscape framework for details.
- 18 Semi mature street trees - see landscape framework for details.



Figure 58 - masterplan character area 4

# -B<sub>5</sub>

## southern access - retirement/care home units

### Retirement and care- housing area

- 1 Retirement homes residential block - aiming to achieve 42 units overall - 3 storey block - addressing the street
- 1a Retirement homes residential block - 2 storey block
- 1b Retirement homes residential block - 2 storey administration and catering block with roof top access.
- 2 Retirement homes communal garden area..
- 3 Retirement homes 'private' garden areas.
- 4a Garden walling and fencing - 1.6m high;
- 4b Garden walling and railings to car park - 1.6m high overall;
- 4c Entrance gates - 1.6m high
- 4d Dwarf garden walls with railings - 1.2m. overall.
- 5 Access road - 'the street' - 6.5m wide in porous asphalt.
- 5a Parking areas with - 20 car parking spaces and 8 disabled - in porous tarmac or permeable block paving;.
- 6a Access from A701
- 6b Reformed access into Pentland Park Residential Park.
- 6c Side access to Retirement residential area
- 7 Main pathway circulation - 2 and 3.0m wide.
- 8 Crossing point in block paving
- 9a Retirement units - access road - 6.5m wide in porous asphal
- 9b Parking areas with - 20 car parking spaces and 4 disabled - in porous tarmac or permeable block paving
- 9c Turning head.
- 10 Care/assisted living units - aiming to achieve 80 units overall - 3 storey block - addressing the street and the A701 (in part)
- 10a Care/assisted living units - 2 storey block.
- 11 Care/assisted living units - communal garden area
- 12a Entrance gates - 1.6m high
- 12b Garden walling and railings to car park and pathway - 1.6m high overall;.
- 12c Dwarf garden walls with railings - 1.2m. overall
- 13 Existing trees retained.
- 14 Existing native hedge retained and enhanced by new inter planting - see landscape framework for details
- 15 Formal grassland - see landscape framework for details
- 16 Proposed informal tree planting - see landscape framework for details.



Figure 59 - masterplan character area 5

# -B<sub>5</sub>

cont/d....

Cont/d...

- 17 Ornamental shrub planting - see landscape framework for details
- 18 Formal avenue tree planting - see landscape framework for details.
- 19 Semi mature street trees - see landscape framework for details.
- 20 SuDS drainage swale ditch - see landscape framework for details.
- 21 Proposed Wild flower/long grass edges - see landscape framework for details.
- 22 Proposed native shrub mix - see landscape framework for details
- 23 Proposed native tree planting (small to medium height) - see landscape framework for details.



Figure 60 - masterplan character area 5 - cont/d....