

Herdmanflat Masterplan - Design and Access Statement

SECTION 7 Development Strategy

Volume 1 - Strategy

7.1 Safeguarding and Enhancing Landscape Character



Liveable Places
Policy 20 - Blue and Green Infrastructure



Sustainable Places
Policy 3 - Biodiversity
Policy 4 - Natural Places
Policy 6 - Forestry, Woodland and Trees

The emerging proposals are founded on the retention of key landscape features and the diversification of habitat types on site, creating a place that supports people, place and nature at Herdmanflat.

The wider landscape character utilises a native planting palette, supporting meaningful biodiversity enhancement through the management of the woodlands and the diversification of habitat types. Both passive and some opportunities for passive recreation are provided to support integration and benefit for the surrounding neighbourhoods.

Key Landscape Features retained:

- ① Orchard retained and used to establish framework for a new community garden
- ② Formal terrace
- ③ Primary open space with species rich grassland
- ④ Green corridor
- ⑤ Existing woodland area - retained and managed and protected
- ⑥ Wet meadow creation linked to future SUDS provision
- ⑦ Tree Lines - retained, protected and managed
- ⑧ Existing Boundary wall - retained



- Key:
- Existing buildings retained and re-purposed
 - Existing woodland areas
 - Existing quality tree lines
 - Existing embankment retained
 - Proposed Development Zones
 - Site Boundary



Concerns were raised that biodiversity would be worse off than it is today. Our approach has been to protect and retain the existing ecology and enhance it where we can.

7.1 Safeguarding and Enhancing Landscape Character



① Orchard retained and used to establish framework for a new community garden



② Formal Terrace - retaining the setting to existing building



③ Primary open space retained and reinvigorated with species rich



④ Green corridor - enhance existing tree line



⑤ Retained woodlands managed to support the long term health



⑥ Wet meadow creation linked to future SUDS provision - existing low point at the bottom of the site



⑦ Category A Lime Avenues has been identified for protection and retention - this restricts development within their root protection



⑧ Existing boundary wall retained

7.2 Landscape Visual Appraisal



Liveable Places
Policy 14 - Design, Quality and Place



Sustainable Places
Policy 4 - Natural Places
Policy 6 - Forestry, Woodland and Trees
Policy 7 - Historic Assets and Places

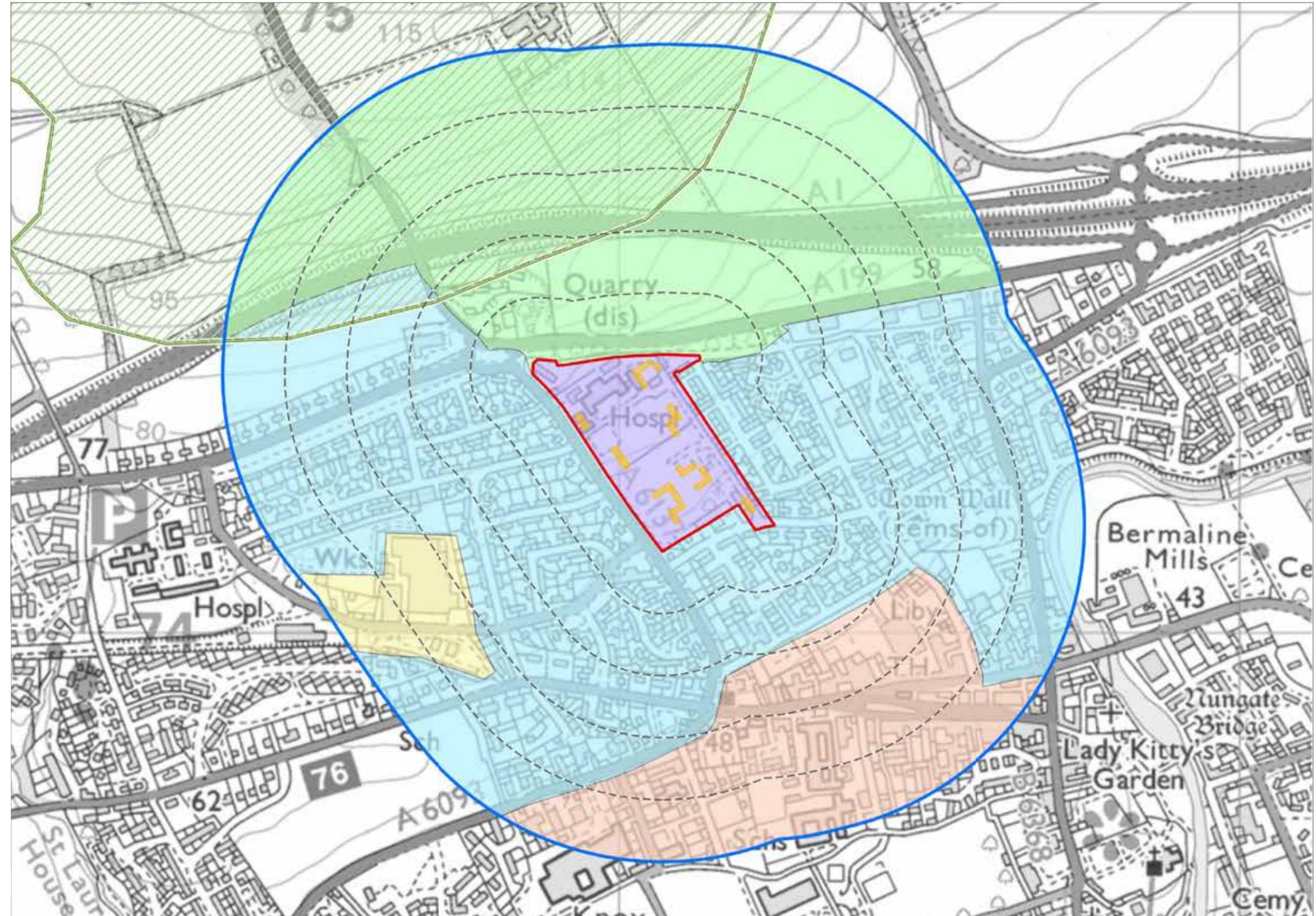
A Landscape and Visual Appraisal (LVA) has been prepared to test the masterplan and examine the effects of the proposed development on:

- Landscape character and resources
- Visual amenity including effects on potential receptors (people) and viewing groups caused by the change in the appearance of the landscape during construction and operation.

The development will lead to some changes in the character of the site with the additional buildings. There will also be visibility of the buildings within the landscape. However, the proposed development will be reasonably well accommodated within the setting through the retention of mature trees and woodlands at the boundary.

A summary is provided of the landscape and visual effects within the full LVA, (Appendix 10.7).

The image opposite is one of a series of diagrams, this one identifies the local landscape / townscape character surrounding Herdmanflat.



- Key:
- Site boundary
 - 500m Study area
 - 100m interval from site boundary
 - Proposed site layout building
- Landscape Character Type**
- Lowland Farmed Plain - Lothians
 - Lowland Hills and Ridges - Lothians
- Local Landscape Character Assessment**
- LLCA 1. Former Herdmanflat Hospital and Grounds
 - LLCA 2. Harperdean Arable Farmland and A1 Corridor
 - LLCA 3. Haddington Town Centre
 - LLCA 4. Residential Properties and Other Built Development
 - LLCA 5. Industrial Estate

7.3 Tree Strategy

7.3.1 Tree Survey

A full site tree survey was undertaken by Alan Motion on 13th September 2021 to identify the quality, type and root protection areas of trees on site, highlighting any that were in poor health and that were in need of immediate management actions.

In consultation with Alan Motion a programme of management works were undertaken including:

- Removal of 13 no. Category U trees that were dangerous and in poor condition.
- 2 no. Category B trees to be removed to facilitate demolition works.
- An area of scrub vegetation clearance within the site of the former Hopetoun Unit.



Tag No	Species	DBH	N	S	E	W	Ht	C.Ht	BS Cat	Condition	Age	Stems	ERC	Comments	Recommendations
528	Scots pine	0.45	1	2	2	3	15	3	B2	Fair	M	1	20 to 40	Canopy suppressed.	
529	Scots pine	0.70	4	2	4	4	15	3	A2	Good	M	1	>40	Included bark, compression fork. Forks at 1.5m	
530	Beech	0.45	2	6	6	2	15	3	B2	Good	M	1	20 to 40	Canopy 1-sided.	
531	Scots pine	0.35	3	3	3	2	15	3	B2	Good	M	1	20 to 40	Minor dead wood (<50mm dia). Small high crown	
532	Scots pine	0.50	3	5	4	3	18	3	B2	Fair	M	1	20 to 40	Crown needs reshaped to make it an A	
533	Scots pine	0.35	2	3	2	2	15	3	A2	Good	M	1	>40	Canopy suppressed.	
534	Scots pine	0.40	3	3	2	2	17	3	A2	Good	M	1	>40		
535	Scots pine	0.35	2	3	2	2	14	3	B2	Fair	M	1	20 to 40	Canopy suppressed.	
536	Scots pine	0.60	3	4	3	5	16	3	A2	Good	M	1	>40	Minor dead wood (<50mm dia).	
537	Scots pine	0.40	2	3	2	2	16	3	B2	Fair	M	1	20 to 40	Stem lean. Slightly misshapen crown	
538	Scots pine	0.40	3	3	3	3	15	3	B2	Good	M	1	20 to 40	Minor dead wood (<50mm dia).	
539	Scots pine	0.35	1	2	1	2	15	3	B2	Fair	M	1	20 to 40	Canopy 1-sided.	
540	Scots pine	0.40	1	3	2	2	15	3	B2	Fair	M	1	20 to 40	Stem lean. Ivy growth obscuring detailed assessment. Canopy 1-sided.	
541	Scots pine	0.55	2	4	4	3	15	3	B2	Fair	M	1	20 to 40	Ivy growth obscuring detailed assessment. Stem lean. Canopy 1-sided.	
542	Scots pine	0.55	2	2	4	2	17	3	B2	Fair	M	1	20 to 40	Ivy growth obscuring detailed assessment. Canopy 1-sided.	
543	Scots pine	0.45	1	2	2	2	16	3	C2	Fair	M	1	10 to 20	Ivy growth obscuring detailed assessment. Canopy suppressed. Small high crown	
544	Scots pine	0.40	2	2	2	2	17	3	B2	Fair	M	1	20 to 40	Canopy suppressed. Small high crown	
545	Scots pine	0.45	2	2	2	3	18	3	B2	Good	M	1	20 to 40	Ivy growth obscuring detailed assessment.	
546	Scots pine	0.50	2	3	2	5	16	3	A2	Good	M	1	>40	Canopy 1-sided.	
547	Scots pine	0.40	4	2	3	4	17	3	A2	Good	M	1	>40	Minor dead wood (<50mm dia).	
548	Beech	0.45	4	4	5	4	16	3	A2	Good	M	1	>40		
549	Beech	0.60	4	5	5	3	18	3	A2	Good	M	1	>40	Included bark, compression fork. Ivy growth obscuring detailed assessment.	
550	Larch	0.20	1	1	4	1	9	3	C2	Fair	E-M	1	10 to 20	Canopy suppressed.	
551	Beech	0.50	5	4	5	4	16	3	B2	Good	M	1	20 to 40	Included bark, compression fork.	
552	Larch	0.25	2	2	2	2	11	3	U	Poor	E-M	1	<10	Canopy suppressed.	
553	Lawson cypress	0.25	1	2	1	1	12	3	B2	Good	E-M	1	20 to 40	Canopy 1-sided.	

Extract from the tree survey classification

7.3 Tree Strategy

7.3.2 Our Emerging Strategy

The Tree Strategy focuses on retaining and protecting our highest value (arboricultural, landscape and ecological value) trees and woodland areas that provide significant contribution to the landscape character of the site.

Consideration has been given to the integration of development utilising the tree protection zones outlined in the Alan Motion Tree Survey. Alongside the woodland zones there are a number of individual specimens and tree lines categorised as high value, likely to provide long term contribution and healthy life expectancy of over 50 years. These trees will be safeguarded from removal and the emerging landscape masterplan defines new areas of succession planting to create a lasting legacy for tree cover on site.

Whilst not meeting the full size requirements to be classified as a Community Woodland, we do recognise that the Herdmanflat woodlands provide significant value to the adjoining communities. The Draft Environment Report: Tree and Woodland Strategy for East Lothian has assisted greatly in developing our tree strategy for the site and has influenced our approach in wanting to retain and manage the woodlands in order to provide a more inclusive access for all through better path networks and accessible routes, seating and play.

In places where we are integrating improvements to access or installing essential infrastructure there may be some limited tree impact and removal. These will be micro-sited with the project arboriculturalist to minimise damage and the zone of impact.

Our strategy proposes no net loss of canopy cover on site through minimising losses and a significant programme



Draft Environment Report: Tree and Woodland Strategy for East Lothian



7.4 Masterplan Layout Development

After reviewing the findings of the feasibility study against the height and density study it became clear that the proposal would need to reduce land take to minimise the impact on the woodland and much loved open space.

As stated earlier in this document, the development needs to address an ageing population and be adapted to individual changing needs. The Tetbury retirement community sets very high standards in architectural and landscape design using a very simple layout of courtyards. This not only brings enclosure and a sense of safety through passive surveillance but highly encourages ownership and social interaction.

The masterplan takes this simple principle and uses the existing landscape feature to create a series of courtyard spaces as many little neighbourhoods within the neighbourhood, communities within the community.



Tetbury retirement community, Proctor & Matthews Architects



Development sketches



Development models



Massing Outline



Landscape Outline



Emerging Masterplan Outline

7.5 Key Spaces



Liveable Places
Policy 20 - Blue and Green Infrastructure
Policy 21 - Play, Recreation and Sport



Sustainable Places
Policy 3 - Biodiversity
Policy 4 - Natural Places
Policy 6 - Forestry, Woodland and Trees

The masterplan proposes the retention of all the key landscape character areas on site alongside a widening of amenity and habitat type.

The formalised areas of landscape are associated with the listed buildings and residential courts. The wider landscape framework is based on strengthening of the woodland belts, tree lines and integration of planting to reduce building dominance.

Key spaces for community amenity include a reinvigorated orchard with community growing space, recreational space with the opportunity for petanque and an extended path network through species rich meadows and woods.



- Key:
- Orchard and community garden
 - Formal terrace
 - Primary Area of community open space with opportunity for future community growing link it to the adjacent open space
 - Recreational space with petanque pitches
 - Private terrace - 3m strip
 - Semi-private spaces
 - Private garden for complex care
 - Green corridor - succession planting and paths
 - Woodland - succession planting and paths between retained trees
 - Indicative location of SUDS - refer to Engineer's drawings for detailed information



Concerns were raised by members of the public at the consultation event about the loss of access, green space and trees and how this would impact negatively on the health and well-being of the wider community.

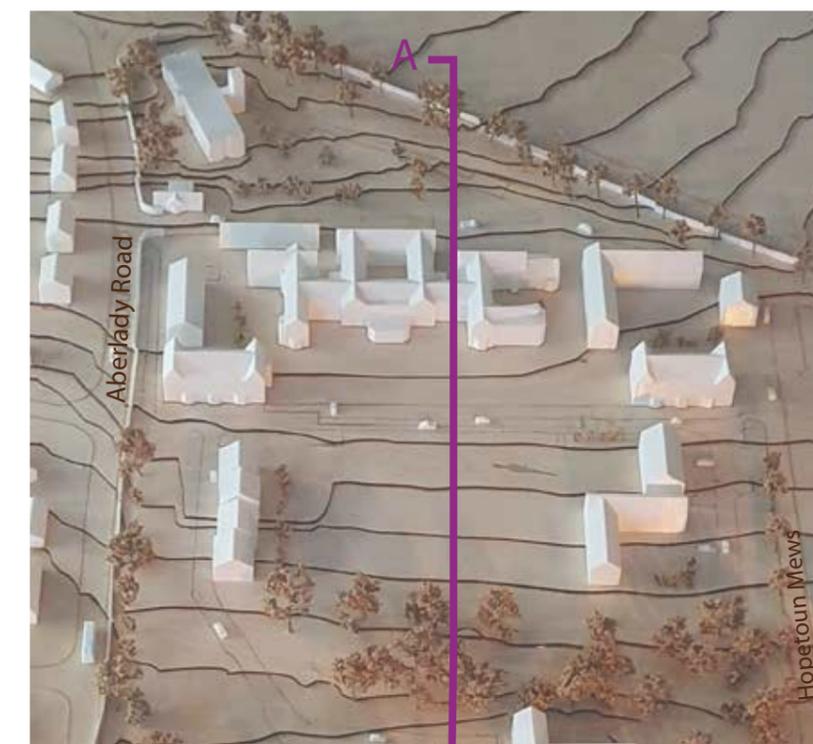
We have taken these comments on board and addressed the concerns raised by introducing more paths and access points into the site to make sure local people can access the green space more easily, providing space for future community growing, and including proposals for recreational spaces.

7.6 Storey Heights and Massing

7.6.1 Cautious Approach to Deight and Density
 During an iterative process, the design team reviewed a variety of options of outline massing and height within the areas considered for development. Guided by the built heritage, the topography and the landscape, these options were reviewed against built mass and storey height.

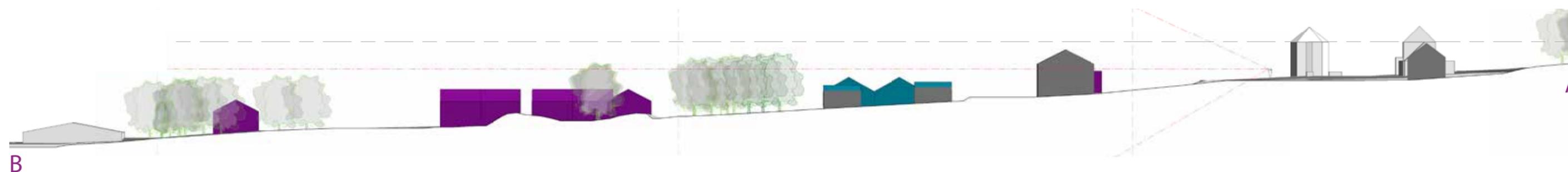
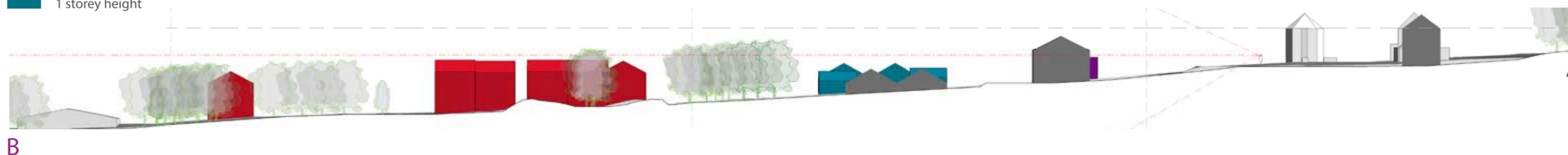
The sections below are early height studies that demonstrate how the built heritage together with the landscape create a series of datum heights which informed the proposal.

The masterplan sets a clear diagram with a maximum height of 3 storeys to any proposed building.



Key:

- 3 storey height
- 2 storey height
- 1 storey height



7.6 Storey Heights and Massing



Liveable Places
Policy 14 - Design, Quality and Place
Policy 16 - Quality Homes



Sustainable Places
Policy 4 - Natural Places
Policy 6 - Forestry, Woodland and Trees
Policy 7 - Historic Assets and Places

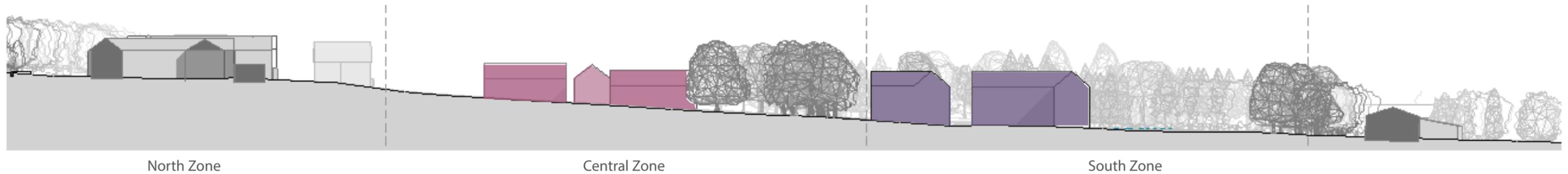
7.6.2 Storey Height Strategy

Both physical and digital models were used to develop initial ideas on the scale, storey heights and massing for the proposed housing. It is a requirement to respect the height, as well as the views from the existing buildings on site. To achieve this, the proposed heights of new build housing range from between 2 and 3 storeys. To put this in context the existing mature trees on site are the equivalent of 4.5 to 5 storeys in height. By limiting the new build housing to a maximum of 3 storeys, we are able to retain key views from eye level on ground floor, out to the Lammermuir Hills.

The adjacent plan and section indicate where the proposed storey heights would be located.



Concerns were raised by members of the public at the consultation event with regard to four storey housing being too high and concerns that housing at this height would overshadow gardens. In response to these concerns, we have pulled development further away from the woodlands and reduced the storey heights to a maximum of three storeys so that new development will feel less imposing.



7.7 Proposed Vehicular Access



Liveable Places
Policy 18 - Infrastructure First



Sustainable Places
Policy 13. Sustainable Transport

7.7.1 Vehicular Access Strategy

Vehicle access to the proposed development will be taken from two locations. The first access will utilise the existing junction on the A6137 Aberlady Road which served the former Herdmanflat Hospital. This access will be used by the majority of traffic on a day-to-day basis.

The second access will tie into Herdmanflat to the east. This access is predicted to be used by approximately 30% of development traffic on a day-to-day basis. More details with regard to this access route will be provided in any forthcoming detailed or AMSC planning applications for the site.

During the pre-application stage of this project an assessment was undertaken looking at the feasibility of providing a third vehicular access via Lydgait. The study confirmed that the Aberlady Road/Lydgait junction has substandard geometry and very poor visibility for Lydgait traffic exiting onto Aberlady Road. Discussions were held with the roads department on developing a design solution for this junction that will be discussed and developed further during detail design stage.

An additional assessment looked at the impact of reconstruction of an adoptable standard vehicle access on the Category A trees located alongside Hopetoun Mews. Detailed examination of this impact, coupled with the road safety study and the desire route for an active travel link to the town centre has led to Hopetoun Mews being proposed for active travel only, in order to keep this route free from vehicles where possible.



Overall, however, increased traffic onto the Aberlady Road/Lydgait junction was considered undesirable for both operational and road safety reasons and so the proposal for a third vehicular access onto Lydgait has not been taken forward.

7.7 Proposed Vehicular Access



Liveable Places
Policy 18 - Infrastructure First



Sustainable Places
Policy 13. Sustainable Transport

7.7.2 Internal Road Layout

Consultation has been undertaken with East Lothian Council's Roads Department on the access strategy for the site, the result of which has developed a clear strategy that limits the amount of access points and new road infrastructure and improves pedestrian links in both formal road settings and informal unadopted paths throughout the site.

For general circulation and access roads, the carriageway width has been set at 4.8m in accordance with Designing Streets, which is sufficient width for two cars to pass. Where perpendicular parking bays are present, the carriageway width has been increased to 6m to allow for safe manoeuvring in and out of the parking spaces. The internal road network will be designed to accommodate the turning requirements of both refuse vehicles and emergency vehicles, with the anticipation that all roads and footpaths will be adopted.

The diagram opposite is an indicative proposal for the design of the road network and associated parking, full details of which will be developed further during the detailed design stage.

7.7.3 Parking Requirements

Early discussions with ELC Roads Department and Planning has agreed the proposals could be developed with a reduced car parking provision at 75% of the number of units for the development. This decision has been driven by an anticipated reduced level of car ownership of later living residents, running in tandem with the councils objectives of lowering carbon emissions and encouraging active travel, that further reflects the proximity of the site to Haddington town centre.



Key:

-  Proposed vehicle entrances
-  3.7m wide road, two way traffic with passing places
-  4.8m wide road, two way traffic
-  6m wide road, two way traffic
-  6m wide parking court
-  3.5m Service Access road (to SUDS)
-  Car parking bays
-  Accessible car parking bays
-  Proposed vehicle entrance to parking court



Concerns were raised about car parking provision and how these might be reduced. Early discussions with ELC Planning and Roads Dept, have agreed to a reduced parking provision that will be developed further during the detailed development for the site.

7.8 Active Travel



Liveable Places
Policy 18 - Infrastructure First



Sustainable Places
Policy 13 - Sustainable Transport

New active travel connections are being proposed, connecting the site to the local area and in doing so supporting the sustainable travel objectives in NPF4.

The priority is to retain community access on site through a network of cycle and footpath routes. The proposal is to connect to the A199 cycle lane through a dedicated shared use path along Hopetoun Mews, to provide a more direct route to Haddington Town Centre. The route to the town centre will be further enhanced by the introduction of drop kerbs at appropriate crossing points.

There will be improved links for disabled people onto Aberlady Road, the locations of which are sympathetic to the positions of existing trees and the existing wall with the access location provided at a desirable position close to the route to the community hospital.

The proposals seek to deliver:

- Retained and extended pedestrian connections
- New cycle connectivity

The internal footpath network will be developed to maximise segregation between vehicles and active travel and, where possible, footpaths will be set back from the road carriageway, either by being placed behind parking bays or segregated by means of a grass verge. The aspiration to achieve this will be developed further at detail design stage.

Concerns were raised by members of the public at the consultation event about new cars entering and leaving the site at Lydgait. This has been addressed by limiting Hopetoun Mews to an active travel route only, thereby helping to limit the impact of vehicles along Lydgait.

- Key:
- Shared use path - Primary Active Travel Route
 - Pedestrian Path Network
 - Pedestrian Path Entrances
 - Proposed New DDA access
 - Indicative location of cycle parking - mix of Sheffield stands and secure bike storage for residents



Ramp at new access onto Aberlady Road to be no more than 1:20



Ramp at connection onto A199 to be no more than 1:20, exact route of path to be determined at detail design stage with input from the arboriculturist.



7.9 Defining the Neighbourhood Connections



Liveable Places
Policy 15 - Local Living and 20 Minute Neighbourhoods
Policy 18 - Infrastructure First



Sustainable Places
Policy 13 - Sustainable Transport

7.9.1 Pedestrian Access & Cycle

The assessment of Herdmanflat's local context allowed the masterplan development to address many of the perceived barriers that emerged, both from the data and the consultation responses, with improvements sought where possible and safe to do so. Whilst access from the site to the majority of Haddington's services can be comfortably achieved within a 20 minute walk, it was clear that access to and from these services is currently only achievable from the northern and southern extremities of the site. This highlighted an opportunity to introduce improvements to the design that could speed up pedestrian and cycle travel times to services by introducing new access points that allow better penetration to the east and west.

It was also recognised that the site could add a significant contribution to East Lothian Council's aspiration to deliver a largely off road segregated travel corridor which provides better connection between East Lothian's principle settlements, employment areas and transport hubs. The masterplan Active Travel proposals include a dedicated cycle and pedestrian route joining the A199 to the north through the site to Lydgait and onwards to the town centre. This active travel corridor will be achieved by fully pedestrianising Hopetoun Mews, which had previously been identified as one of the principle vehicular access routes from Lydgait.

7.9.2 Existing Pedestrian Access

There are currently four pedestrian access points, with one of these providing access to the former Garleton Building only. The other three access points lie to the north-west and to the south-east which provide a convenient short cut

from Lydgait to the top of Aberlady Road. The masterplan demonstrates that the introduction of additional pedestrian access points not only provides better access overall, but also provides a more cohesive means of integrating with the communities living immediately to the east and west of the site. These new proposed access points will not only create better permeability, but safer access for disabled people, avoiding the poor pedestrian provision at the Lydgait / Aberlady Road Junction.

The following diagram demonstrates how the masterplan has considered improvements to pedestrian and cycle movements and the benefits that will be achieved.



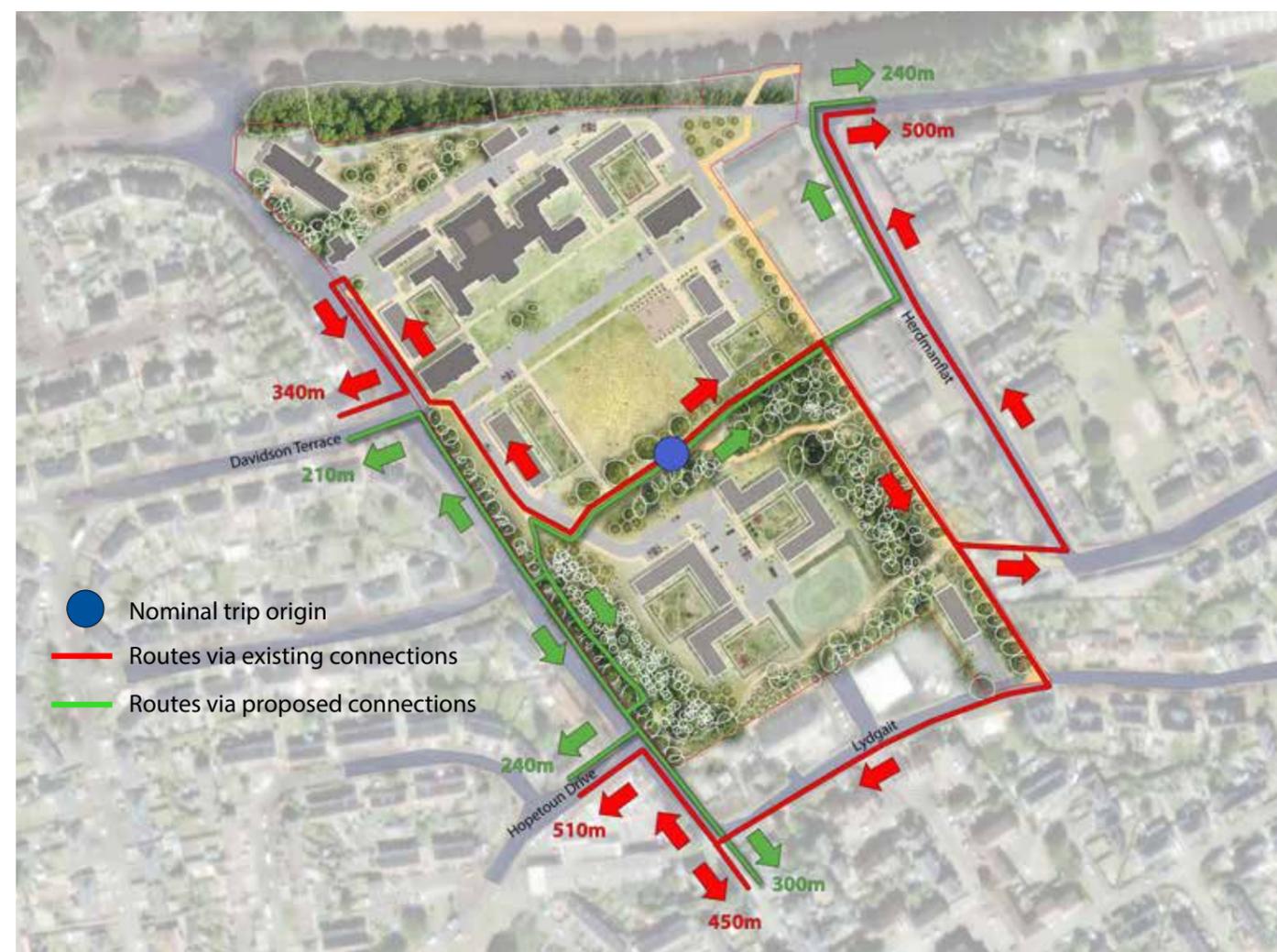
7.9.3 Pedestrian Walking Route analysis within the context of the 20 Minute Neighbourhood

In order to demonstrate that development will contribute a beneficial gain for pedestrians and cyclists, the masterplan development has been informed by an analysis of three key routes as they exist today, and following the introduction of the proposed new access points.

The three walking routes investigated were:

1. From mid-way along Davidson Terrace to the GP surgery on Newton Port.
2. From the centre of the southern part of the site to the COOP on Hopetoun Drive.
3. From the top of Herdmanflat to the New east Lothian Community Hospital

The diagram below demonstrates how the introduction of new connection routes from the site to Herdmanflat to the east and to Aberlady Road will shorten travel distances considerably, allowing pedestrians to enter the site more easily, providing safer, shorter routes directly through the site. This has the added benefit of promoting easier access to the proposed open space and woodland walks, integrating the site more cohesively with the surrounding communities.



7.10 Defining the 20 Minute Neighbourhood

The diagrams opposite demonstrate how the masterplan will work to shorten walking times between the start and finish points of each of the walking routes investigated.

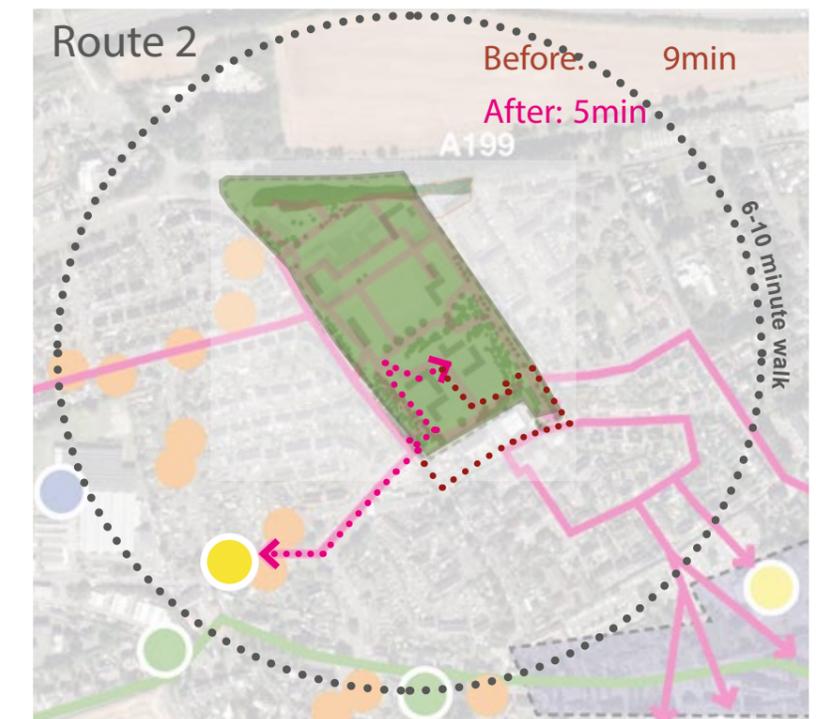
The results show that the introduction of the proposed new connection points to the east and the west will shorten distances and improve walking times in all cases. The results show a betterment as follows:

- Route 1:
Introduction of a new DDA compliant access on Aberlady Road will reduce walking times by approximately 1 minute by way of a much safer and direct route through the site.
- Route 2:
Introduction of a new access point to the south-west of the site to Aberlady Road will reduce walking times to the Co-op by approximately 5 minutes, avoiding the need to double back to the existing Lydgait entrance.
- Route 3:
Introduction of a new connection mid way up Hopetoun Mews to Herdmanflat and a new connection point mid-way up Aberlady Road will reduce walking time by approximately 5 minutes via a direct route through the middle of the site.

Taken together, the beneficial gain that redevelopment can be shown to deliver in terms of the 20 Minute Neighbourhood (and to Place more generally) is represented by the time differences noted on the diagrams opposite. These times show that redevelopment of Herdmanflat will increase the current extent of the twenty minute walking catchment that exists today.



Concerns were raised regarding the Climate Crisis. The proposals respond to this by contributing to improved land resource efficiency and by investing in housing that promotes walking, cycling, easier access to greenspace and woodland, reduced car use, and encourages use of public transport.



- Key:
- Former Herdmanflat Hospital Site
 - National Cycle Network
 - Nearest Bus Stops (within 6-10 min walk)
 - Food Retail
 - Hospital
 - GP Practices
 - Pharmacist
 - Park
 - School
 - Church
 - Business Area
 - Proposed key path routes

7.11 Proposed 20 Minute Neighbourhood



Productive Places
 Policy 27 - City, Town, Local and Commercial Centres
 Policy 31 - Culture and Creativity



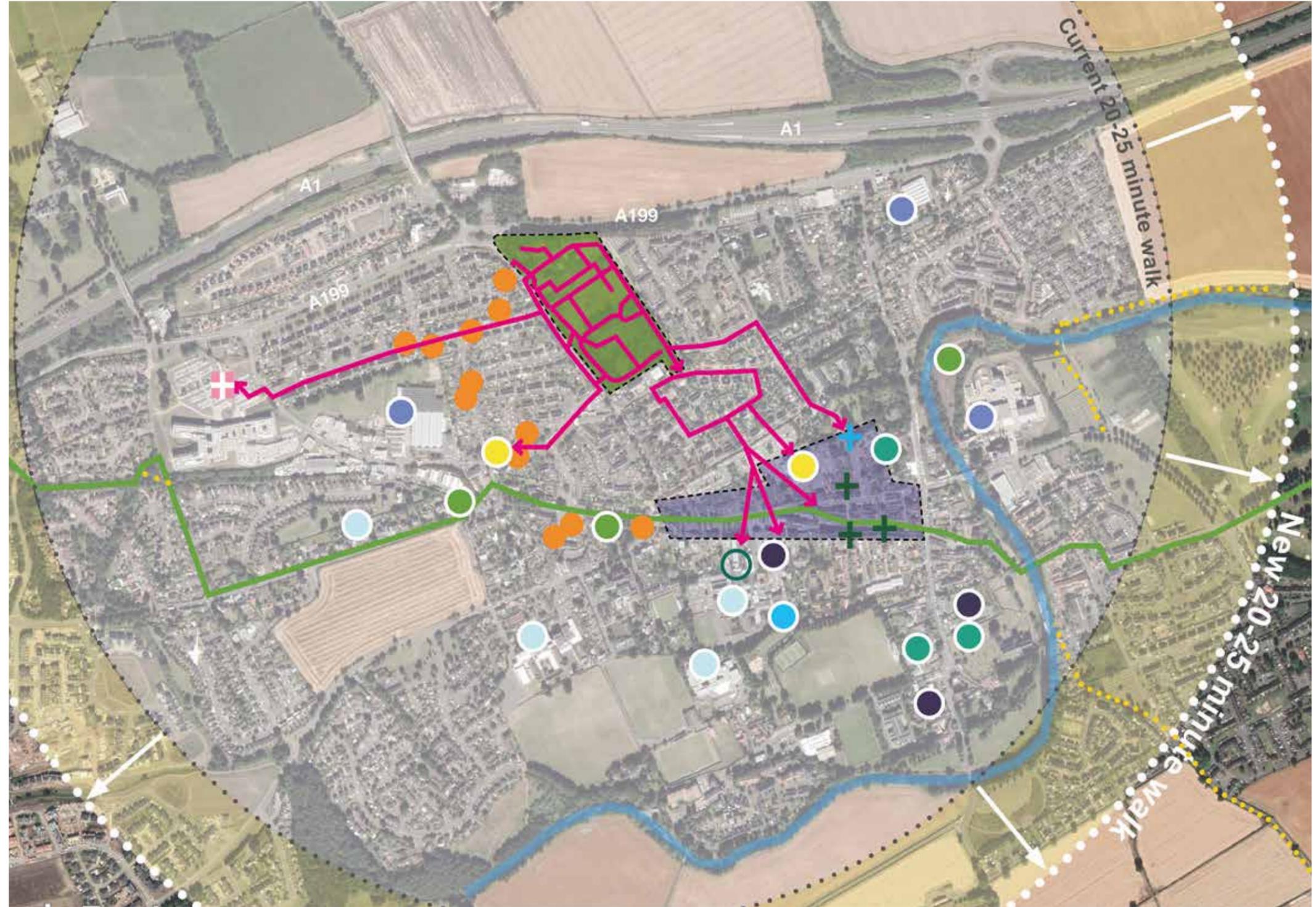
Liveable Places
 Policy 15 - Local Living and 20 Minute Neighbourhoods



Sustainable Places
 Policy 13 - Sustainable Transport

The introduction of new access points to the site, as well as the improved path network, will provide more travel route options and better links to amenities within the 20 minute neighbourhood of the site.

The diagram to the right illustrates how the proposed path network will bring a greater number of amenities within a easy reach.



- Key:
- Former Herdmanflat Hospital Site
 - Town Centre
 - Core Paths
 - National Cycle Network
 - Nearest Bus Stops (within 6-10 min walk)
 - Council HQ
 - Food Retail
 - + Hospital
 - + GP Practices
 - + Pharmacist
 - Sports Centre
 - Park
 - School
 - Community Centre
 - Church
 - Business Area
 - ← Proposed key path routes

7.12 Character of the New Neighbourhood

The proposed Place Framework is based on a Landscape Led Approach to development and consideration of the future health and safety of the site and its assets.

We have established development zones through careful consideration of the site's key landscape assets, access, opportunity for community integration and heritage.

Zones shown in light blue in the plan opposite have been identified as having the opportunity to accommodate some development and provide housing for older people, whilst:

- Retaining the site's key landscape assets.
- Retaining access through woodlands and open spaces. Safeguarding the heritage character.

These elements of the new neighbourhood then have specific challenges in responding in specific contextual conditions:

North Zone - The Courtyards

The new buildings around the hospital create courtyards and patios in direct reference to the historical fabric.

Central Zone - The Meadows

The new buildings either side of the main open space create the framing for this space that shapes the new wild flower meadow.

South Zone - The Woodlands

Hidden behind the most imposing trees of the site, the new buildings in the southern zones create courtyards where new planting will integrate with, and enhance the existing landscape setting.



Key:

- Development zone
- Existing Listed Buildings
- Proposed New Build
- Footprint of former Hopetoun Unit (demolished 2009)

7.13 Sustainable Drainage Strategy



Liveable Places
 Policy 18 - Infrastructure First
 Policy 20 - Blue and Green Infrastructure
 Policy 22 - Flood Risk and Water Management



Sustainable Places
 Policy 3 - Biodiversity

Options for the preliminary sewerage network, which take account of the nearby drainage infrastructure and that incorporate the necessary SUDS management components, have been developed based on the available architectural layouts. The proposed system generally consists of:

1. A traditional gravity network to collect the storm water run-off from the various development plots and convey it to the proposed SUDS devices.
2. A system of underground tanks and a detention basin to provide the necessary treatment and attenuation.
3. A traditional gravity network to convey the restricted discharge from the SUDS devices to the receiving watercourse.

The drainage strategy diagram to the right shows that more than one option for the routing of foul and surface water have been identified. Each option can be explored further upon the development of detailed design.

To limit the impact on the nearby Harperdean culvert, the discharge rate from the site is to be limited to the 1 in 2 year greenfield run-off for all events within the appropriate design return period (1:200 year). The necessary resilience has been provided by allowing for an uplift of 40% to account for climate change.

It is proposed that all foul discharges from the development be collected by a traditional gravity pipe network, which is to be connected to the combined sewerage system in Lydgait or Hopetoun Mews. The proposed foul water sewerage system is to be designed, in accordance with the latest edition of Sewers for Scotland, to operate without surcharge and achieve self-cleansing.



- Key:
- Foul Water
 - Surface Water
 - Drainage Surface Water Alternative A
 - Drainage Surface Water Alternative B
 - Drainage Foul Water Alternative 1
 - Drainage Foul Water Alternative 2
 - Drainage Foul Water Alternative 3
 - SUDS Basin
 - Underground Water Storage



Concerns were raised regarding the Climate Crisis and how green spaces should be protected. The proposals recognise and respect the importance of the landscape, and how access to open space can benefit the community. The proposals will rewild parts of the site whilst also providing a SUDS basin that will assist in attracting further biodiversity to the site.

7.13 Sustainable Drainage Strategy



Liveable Places
 Policy 18 - Infrastructure First
 Policy 20 - Blue and Green Infrastructure
 Policy 22 - Flood Risk and Water Management



Sustainable Places
 Policy 3 - Biodiversity

It is anticipated that the surface water sewerage system will be prospectively adoptable from the disconnecting manhole on each plot to the connection to the receiving water course. The design of the proposed system must therefore take account of the latest edition of Sewers for Scotland and the SUDS Design Manual (CIRIA C753).

As the surface water is to discharge to the natural water environment, the level of treatment provided must meet with the recommendations of The SUDS Manual (CIRIA Document C753) and SEPA. A possible treatment strategy has been developed, on this basis.

To the right are some examples of sustainable drainage systems which demonstrate how these can be used as an opportunity to improve amenity and biodiversity through the integration of green infrastructure. The proposed SUDS basin to the south of the development could be used as a recreational space, to help create habitat and increase biodiversity.



Opportunity to create habitat and increase biodiversity in and around the SUDS basin



Opportunity to create a recreational space around the SUDS basin



Precedent example of SUDS basin in Gullane, East Lothian



7.14 Energy Strategy



Liveable Places
Policy 19 - Heating and Cooling



Sustainable Places
Policy 1 - Tackling the Climate and Nature Crisis
Policy 2 - Climate Mitigation and Adaptation
Policy 11 - Energy

The proposed energy strategy for the new housing is still under review as part of a wider consultation being undertaken by the Council, however all options will comply with the following policies;

- National Planning Framework 4
- The Energy Efficiency Standard for Social Housing
- Scottish Building Regulations

The energy strategy for existing buildings (shown in blue within the red boundary) will be treated differently to the new build housing due to the constraints in terms of Planning as well as systems integration.

It is proposed that new housing (shown in green), which will be comprised of one and two bed flats, will be served by a self-contained system. The exact heating system will be determined following the completion of the life cycle review currently being undertaken by East Lothian Council.

The existing buildings, to be converted to flats, would likely be best served from a district heating system to keep the maintenance of the system out with the flats and allow for easier integration. It is proposed that the Garleton Building will also be connected to this system as part of the phased re-development.



Concerns were raised regarding Climate Crisis. The proposals contribute to reducing carbon emissions through the development of low carbon housing and through the repurposing of the listed buildings and bringing a brown field site back into active use.



NPF4

The policies from the National Planning Framework 4 which are addressed by this energy strategy are Policies 1 and 2. These policies prioritise the global climate emergency as a key consideration in all plans and decisions and ensure emissions from new development shall be minimised.

Policy 1 states that significant weight will be given to developments which consider the global climate and nature crises. Our approach to Policy 2 is explained in the table to the right.

National Planning Framework 4 - Policy 2	Herdmanflat Compliance with National Planning Framework 4
A) Sited and designed to minimise life cycle greenhouse gas emissions	New dwellings shall be designed to optimise the form factor and glazing orientation to benefit from useful heat gains in winter but reduce overheating risks in summer. New fabric and glazing shall be selected to minimise energy demands. Attention to detail of junctions shall ensure no unexpected heat losses.
B) Sited and designed to adapt to current and future risks from climate change	Excellent fabric performance to minimise exposure to climate change impacts. Overheating analysis shall be carried out and designs shall minimise risks accordingly. MVHR shall be provided to assist in ensuring good indoor conditions without a need to open windows.
C) Support of proposals to retrofit measures to existing developments that reduce emissions or support adaptation to climate change	Existing buildings shall be refurbished to improve fabric performance and air tightness where possible. MVHR shall be provided to recover heat that would otherwise be lost and ensure good indoor air quality.

7.15 Energy Strategy - Option Appraisal

Key Energy Strategy Targets

Utilise building physics to assess an optimal form, factor and glazing orientation. Adopt a fabric first approach for heating and over heating analysis.

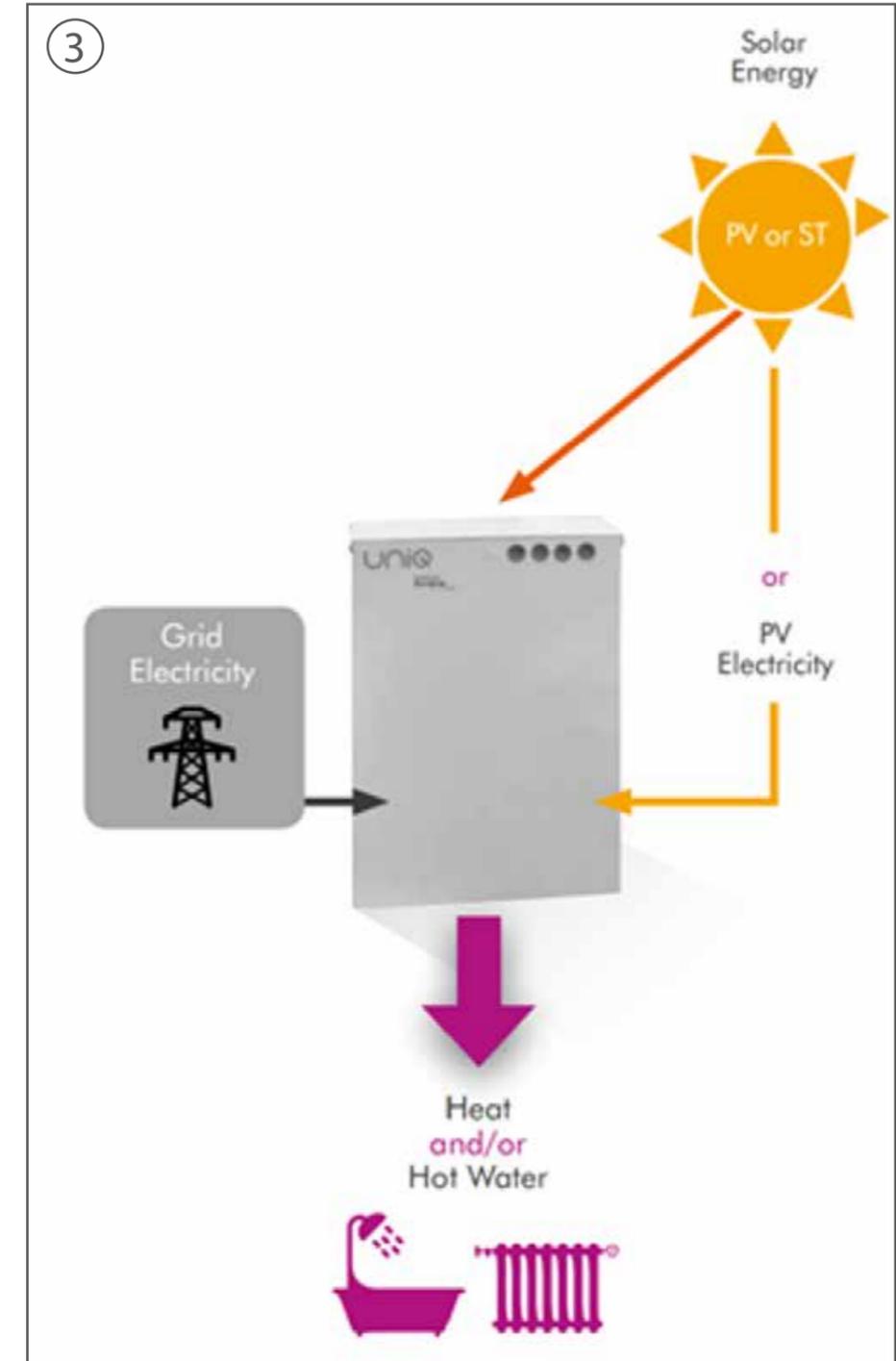
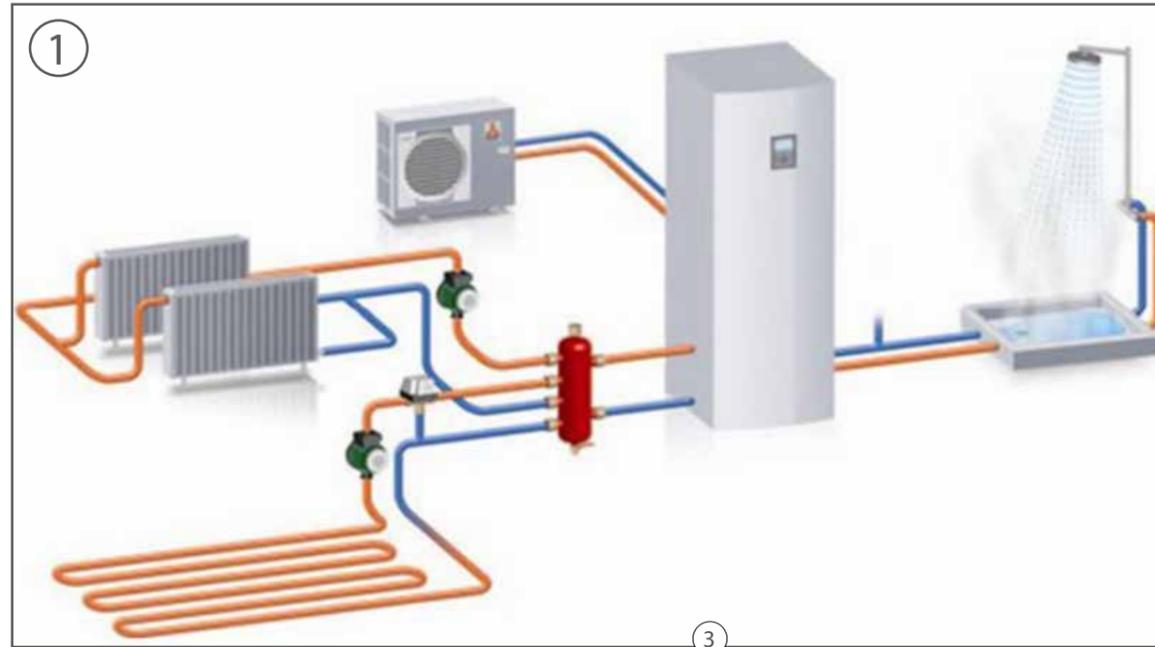
- Life cycle running costs as well as carbon impact to be considered.
- On all properties, MVHR should be considered to reduce winter energy demands and ensure good indoor air quality. MVHR could be central or on a unit-by-unit basis.
- Access to heat pumps / MVHR units located out with the property should be considered to reduce the need for maintenance staff to enter the domestic properties.
- Refurbishment - consideration of the implications of improving insulation and thermal bridging on the existing fabric but with a view to maximising the opportunities for improvements.

Energy Options (New Build)

- ① Air Source Heat Pump with integral MVHR:
 - Suitable for small apartments.
 - Fossil fuel free heating system.
- ② Air Source Heat Pump with separate MVHR:
 - Suitable for larger apartments.
 - Fossil fuel free heating system.

Energy Options (Existing refurbished)

- ③ Direct Electric with Battery Storage and separate MVHR:
 - Suitable for retrofit where air source is not an option.
 - Combine with PV and battery storage to supply renewable energy.
- ④ District Heating (not shown).



7.16 Energy Strategy - Precedent Study



Liveable Places
Policy 14 - Design, Quality and Place
Policy 16 - Quality Homes



Sustainable Places
Policy 2 - Climate Mitigation and Adaptation
Policy 4 - Natural Places

This award-winning development consisting of 100 socially rentable properties for Norwich City Council, is an excellent example of social housing which meets a high sustainability standard. The housing mix consisting of family sized houses and flats, achieved Passivhaus Certification and utilised energy strategies such as those mentioned in the previous page.

Whilst being a high density development, the site offers pedestrian friendly streets and car free access to play areas.

Reference - Mikhail Riches
<https://www.mikhailriches.com/project/goldsmith-street/>



7.17 Outline Services Layouts



- Key:
- Existing BT chamber to be replaced
 - - - Existing BT duct to be replaced
 - - - New BT duct coupled with chambers
 - Proposed low voltage ducting and street lighting
 - Existing street light positions and cable route
 - Existing incoming water supply point
 - H New Hydrant in existing location
 - H New Hydrant in new location
 - - - Proposed water main
 - - - Proposed Hydrant main
 - - - Existing high voltage route
 - - - Proposed connection from substation

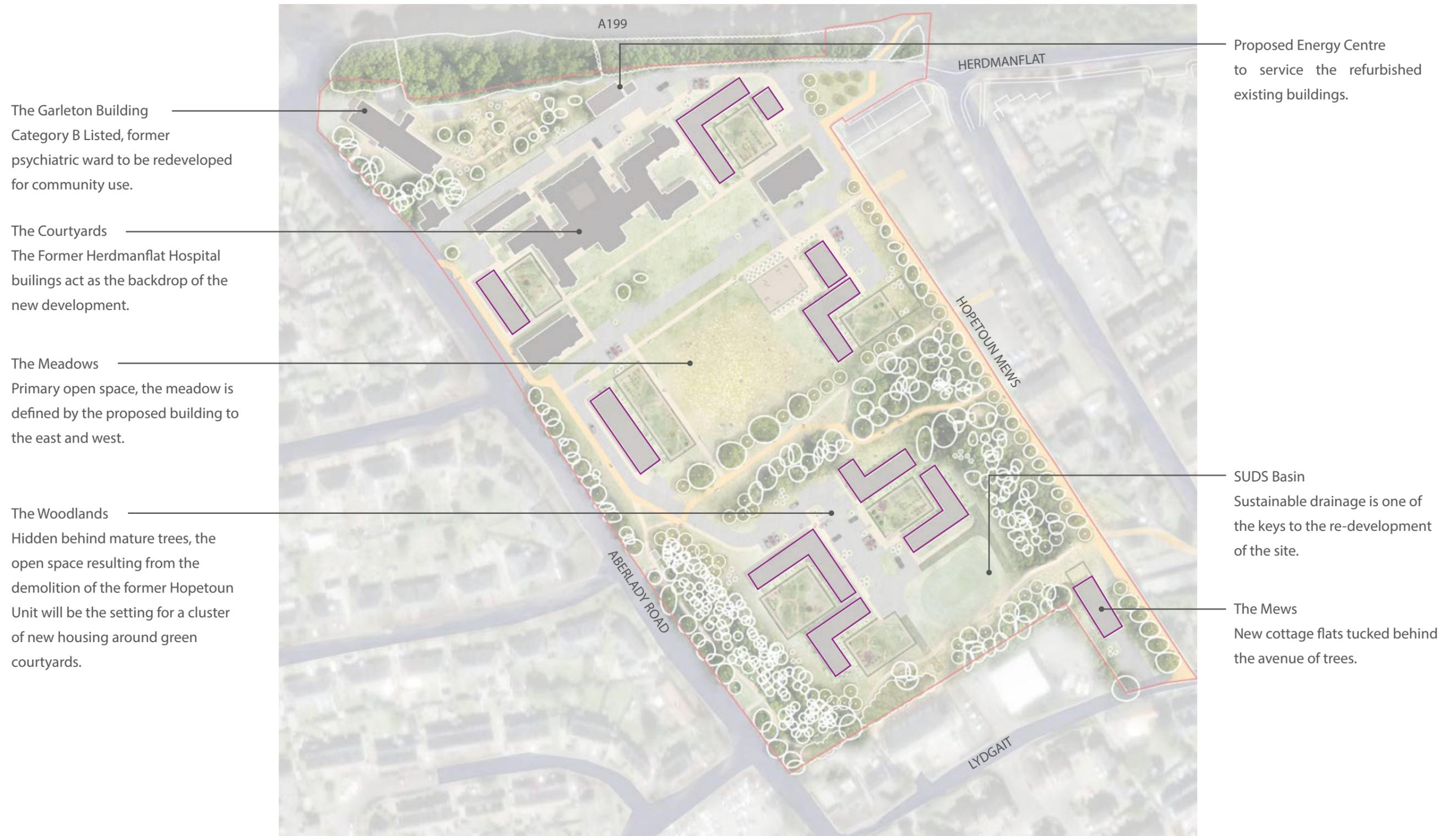
Illustrations are indicative and subject to further investigation and review during detailed design.

Herdmanflat Masterplan - Design and Access Statement

SECTION 8 Proposed Masterplan

Volume 2 - Delivery

8.1 Outline Masterplan



8.2 Illustrative Landscape Masterplan

The illustrative masterplan opposite shows how the new residential buildings are integrated within the landscape framework. Key Landscape proposals include:

- ① Orchard and community garden
- ② Formal terrace
- ③ Primary area of community open space
- ④ Recreational space with petanque pitches
- ⑤ Private terrace - 3m strip
- ⑥ Semi-private spaces
- ⑦ Green corridor - succession planting and paths
- ⑧ Woodland - succession planting, paths and incidental play
- ⑨ Protected tree line avenues with succession planting
- ⑩ Meadow creation linked to SUDS
- ⑪ Private gardens for complex care use
- ⑫ Existing boundary wall retained
- ⑬ Active travel routes connecting site to wider area - 3m wide
- ⑭ Tree belt along northern boundary of site



8.3 Illustrative Axonometric View



- ① Orchard and community garden
- ② Formal terrace
- ③ Primary area of community open space
- ④ Recreational space with petanque pitches
- ⑤ Private terrace - 3m strip
- ⑥ Semi-private spaces
- ⑦ Green corridor - succession planting and paths
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- ⑬ Active travel routes connecting site to wider area - 3m wide
- ⑭ Tree belt along northern boundary of site

8.4 Selected Key Views - As Proposed



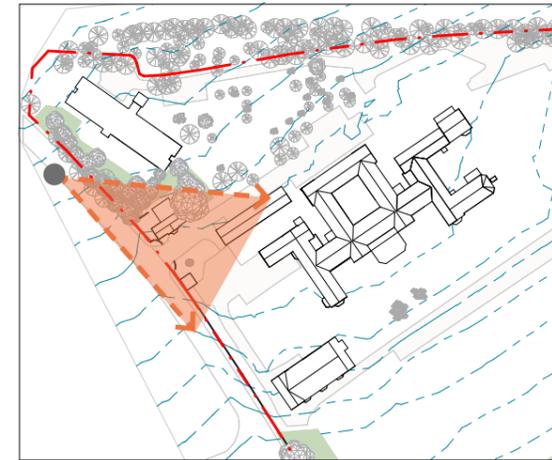
Liveable Places
 Policy 14 - Design, Quality and Place
 Policy 16 - Quality Homes



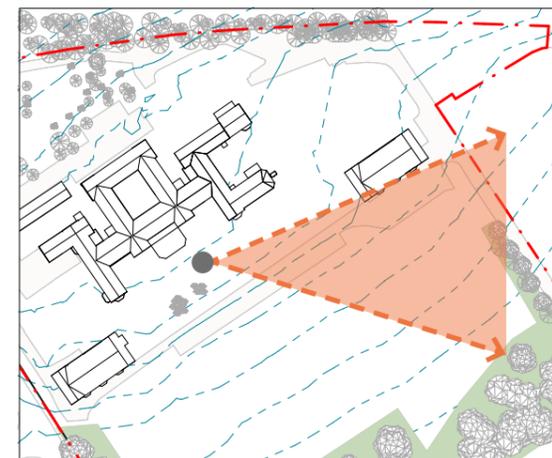
Sustainable Places
 Policy 7 - Historic Assets and Places



Aberlady Road Site Entrance - view south east



Meadow - view south east



8.4 Selected Key Views - As Proposed



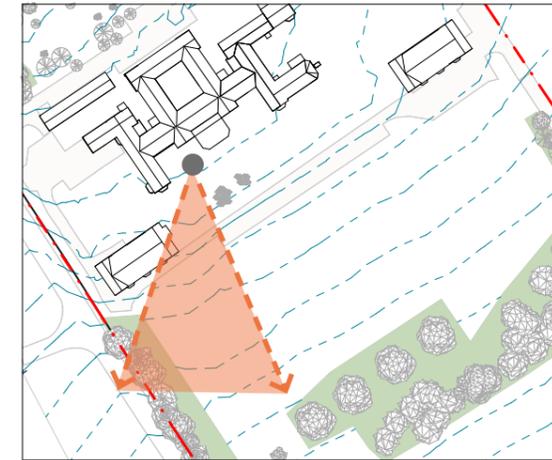
Liveable Places
 Policy 14 - Design, Quality and Place
 Policy 16 - Quality Homes



Sustainable Places
 Policy 7 - Historic Assets and Places



Meadow - view south west



Pencraig - view north west



8.4 Selected Key Views - As Proposed



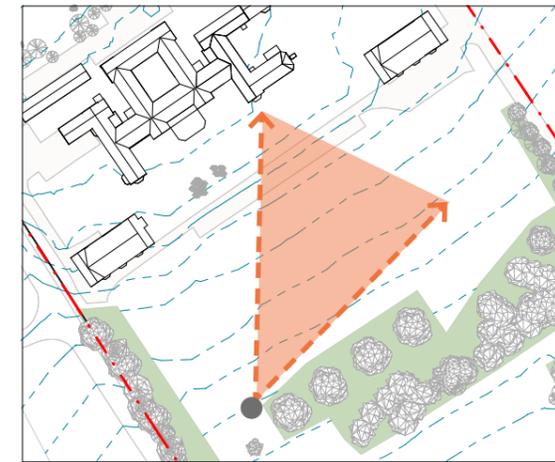
Liveable Places
 Policy 14 - Design, Quality and Place
 Policy 16 - Quality Homes



Sustainable Places
 Policy 7 - Historic Assets and Places



Lammerlaw - view north east



Hopetoun Mews - view west



8.5 Landscape Character Zones



Seating and benches incorporated to encourage socialisation and relaxation



Existing orchard retained



Creating spaces for small community gatherings



Raised planters with seating built in



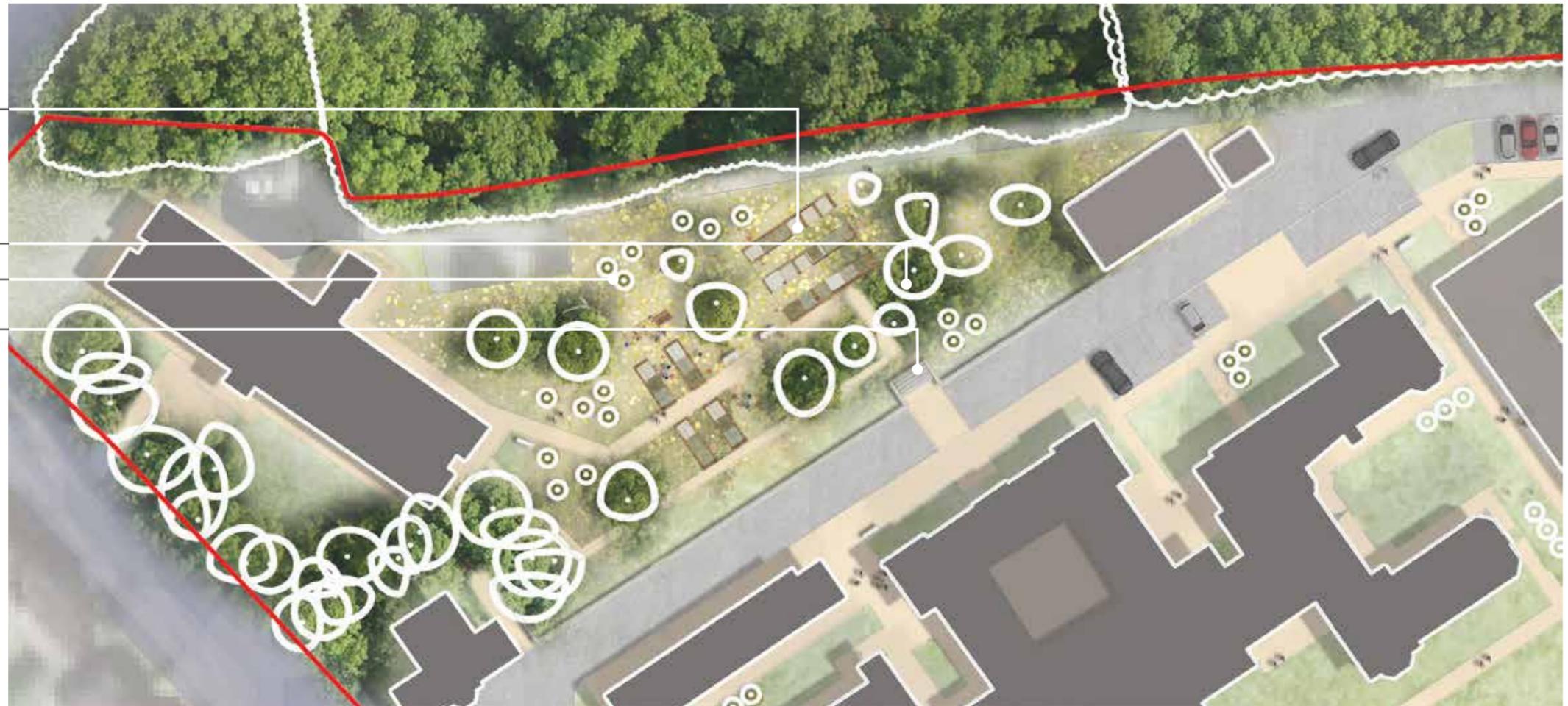
Opportunity for intergenerational gardening and food security

Community garden with raised timber planters (including 2 wheelchair accessible planters), picnic benches, timber benches, potting shed (approx 6 x 4ft), small greenhouse (approx 6x 4ft), compost bins and 300-500L water butts

Existing orchard retained

Proposed orchard planting to ensure succession of orchard

Steps from the main entrance up to the orchard / community garden



Opportunity for community growing space is provided around the existing orchard.



8.6 Key Spaces - Formal Terrace & Community Open Space



Opportunity for activities including Petanque



Outdoor chess with specimen tree planting



Species rich meadow



Formal lawn terrace retained

Formal Terrace retained with key views retained

Recreational space - suitable for petanque, outdoor chess and table tennis

Opportunity for future allotment subject to further consideration and consultation at detailed stages

Species rich open meadow space

Existing tree line retained with succession planting to support long term field maple avenue

New succession tree planting to enhance existing avenue of trees



More active and inclusive recreation is provided through site connections and features such as inclusion of petanque/ games space and play spaces.

8.7 Key Spaces - Private Terrace & Semi-Private Garden Spaces



Allowance for areas of seating and areas of socialisation



Path lighting to encourage evening use



Encourage wildlife friendly design including bee and bug hotels and bird boxes



Mixed native hedge around perimeter of semi-private gardens



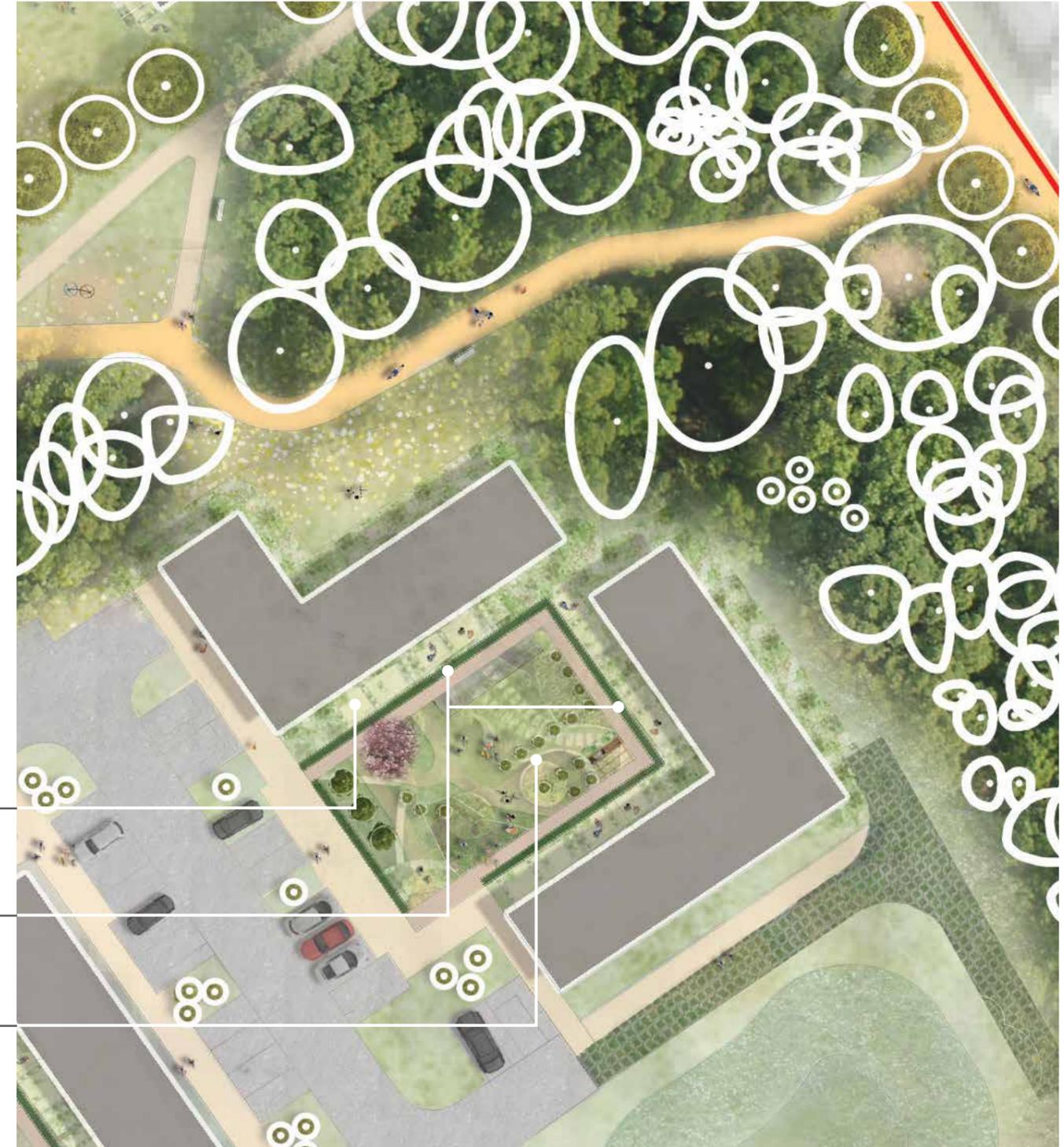
Private terraces and flexible seating



Individual private terraces provide opportunities for residents to personalise and occupy with items such as seating and pots.

Soft planted boundary between private terraces and wider communal garden courts.

Residents communal garden space with seating, planting, paths and opportunities for food/vegetable flower production. Wildlife interventions encourage throughout gardens such as bee friendly hotels and bird boxes.



Residents gardens provide further opportunities for growing space and fostering a sense of community/neighbourliness.

8.8 Key Spaces - Woodland



Woodland Edge planting including bulb planting



Timber benches installed along path to increase accessibility of woodland walk and active travel route



Incidental play in woodland



3m wide active travel route

Indicative location of incidental play

Timber benches every 50m to increase accessibility of woodland trail

2 no. new pedestrian entrances on the western boundary

Existing boundary wall

Woodland edge planting



Woodlands are retained and enhanced with new paths, seating and informal play.

Herdmanflat Masterplan - Design and Access Statement

SECTION 9

Masterplan Delivery

Volume 2 - Delivery

9.1 Precedent Study - Muirskieth Road, Glasgow

The site which was previously owned by Glasgow City Council was re-purposed to provide 32 new houses on Muirskieth Road in Glasgow, designed for Home Group Scotland. The development which is located nearby a conservation area is well served by local amenities and schools.

Proposals incorporated existing trees around the new housing and introduced new landscaping, parking and pathways.

Reference - Collective Architecture
<https://www.collectivearchitecture.com/projects/projects-muirskieth-road>



9.2 Precedent Study - Victoria Park, Haddington



Liveable Places
Policy 14 - Design, Quality and Place
Policy 16 - Quality Homes



Sustainable Places
Policy 4 - Natural Places

Victoria Park, whilst much smaller in scale, is a good local example of how East Lothian Council has previously developed affordable amenity council housing for older people within a sensitive environment.

The site is within a 2 to 3 minute walk from the Herdmanflat site, and was completed in early 2015. The site is within the Haddington Conservation Area and includes a section of the Grade C listed Haddington Town Wall. The development of 20 flats demonstrates that working within these constraints of a historic and landscape setting, with many mature protected trees, a development can be designed in a carefully and considered way and be designed to work successfully within an existing and historically sensitive way.

The housing has been designed to sit within an existing treescape, and some 9 years later demonstrates that the choice of materials and proactive approach to maintenance, coupled with continued tenant "ownership" of garden and communal space has led to the creation of a very successful Place.



Former Herdmanflat Hospital Site

Victoria Park Affordable Housing



Reference - East Lothian Council affordable housing development

9.3 Precedent Study - Costorphine Road, Edinburgh



Liveable Places
Policy 14 - Design, Quality and Place
Policy 16 - Quality Homes



Sustainable Places
Policy 4 - Natural Places

The development sensitively converted three existing Category B buildings, Torwood House, Stable Block and Gatehouse Lodge; faithfully retaining and restoring original features, whilst providing a new lease of life in remodelling the layouts to suit the requirements of modern family living.

In conjunction with this, two new build blocks were delivered as part of the scheme which adopt a palette of materials lending from the existing buildings whilst delivering a distinctly contemporary architectural language to narrate the evolution of the site.

The blocks are set back from Corstorphine Road utilising existing tree coverage to sit harmoniously within the context.

Reference - Oberlanders Architects

<https://www.oberlanders.co.uk/work/tor-house-corstorphine>



9.4 Materiality Study

9.4.1 Suggested Material Palette

Facing Brick:

While the existing hospital buildings are mainly built of East Lothian stone, there is a traceable history of brick manufacturing, notably in the neighbouring town of Aberlady.

Careful choice of tone and finish of clay brick will compliment the tint of the stone and provide a durable and robust material to the new build façades.



Slate:

Found on the existing buildings, slate roofing is defining of the architectural character of the area.

Zinc:

Zinc roofing & cladding is a strong alternative to slate, with strong resilience and natural tones

Timber:

Frequently used in rural or agricultural setting, timber cladding is increasingly popular in housing development.



9.4.2 Existing Materiality within Site Area



Garleton Building / Precast concrete



Lydgait / Brick and clay tiles



Old Herdmanflat Hospital / Stone and slate



Hopetoun Mews / Render and clay tiles

Stone:

While historically widespread on the site, the cost involved in sourcing and building with quality stone which would not create a pastiche of the original is seen as very prohibitive to an affordable scheme.

Render:

The render found on neighbouring properties demonstrate the lack of durability and reveals obvious maintenance issues.

9.5 Outline Specifications

9.5.1 Accessibility and Adaptability

All properties within the development will comply with Housing for Varying Needs document (circa 1998) or latest update available at the time of establishing the detailed design for the scheme. Part 1 of the Housing for Varying Needs guide which introduces a Scottish Accessible Homes Standard through updates to the building standards and guidance is currently in consultation. The Council and design team will keep abreast of any updates and review if these would be appropriate for incorporation within the scheme.

The development aims to provide ground floor properties sized accordingly for wheelchair users as well as all upper floor properties having the ability to be adapted for wheelchair accessibility and hoists, should they be required during the life of the home occupier.

9.5.2 Existing Building Refurbishment

External Walls

Existing walls to each building will be retained as far as feasible. Should sections of new construction to the existing buildings be required, they will be proposed as masonry cavity wall construction with stone outer leaf. Infills to existing openings / alterations to existing stone buildings will be proposed as solid infill (100mm outer stone face with engineering brick behind) subject to a Structural Engineers' confirmation. U-values of the existing building fabric will be assessed to determine the U-value required to the new build elements.

Roofs

Existing roofs will be thermally upgraded either:

- above ceilings with insulation between and above the ceiling ties, or;

- between and below the rafters where the ceiling is proposed to be inclined. Though the existing roof structure may limit the depth of proposed insulation, the U-value will meet technical building standard requirements as a minimum, and most likely adopt lower (improved) U-value targets as the detail of the housing typology emerges.

Roofs will need to be stripped of slates to allow the condition of the sarking boards to be assessed – allow for replacement/ renewal, installation of new breathable membrane and slates to be reinstated as condition allows.

Windows

Existing windows to the hospital building will be replaced with like for like double glazed units to the approval of Listed Building Consent. Extent of upgrading to be agreed with Building Control to each building.

Doors

Existing external doors will be retained where feasible/ suitable. New external door sets will look to match the style of panning and mouldings of existing doors and will be subject to Building Control and Listed Building Consent.

Floors

Existing timber floors will be thermally upgraded with insulation to be fitted between joists. Existing joist depth and service distribution zone will determine the depth of insulation feasible and the associated U-value.

Ground floor above solums to be reviewed on a case-by-case basis, however, it was generally seen that external ground levels have risen over the years, in many cases

obstructing the solum vents and breaching the original slate/bitumen DPC. External ground levels to perimeter of the buildings to be reduced accordingly to achieve 150mm below DPC and allow solum vents to function subject to investigation trial pits being conducted to determine level of footings.

9.5.3 New Buildings

External Walls

New build external walls may be constructed in:

- Masonry cavity wall construction with facing brick outer leaf and possible timber cladding. Walls to have partial cavity fill insulation to achieve U-value targets to be determined as the housing typology emerges. Lined internally with plasterboard, or;
- Timber kit with facing brick outer leaf for two storey construction with an internal layer of structural OSB board forming the inside airtight layer with a services zone inboard of this.

It is proposed to use non-combustible insulation throughout all walls and roofs.

Roofs

Proposed roof construction will be determined during detailed design stage and may consist of:

- A standing seam, self-ventilating metal roof on a timber roof structure subject to Structural Engineers' recommendations, or;
- A slate roof on timber roof structure subject to Structural Engineer's recommendations.

Windows

Windows to have restrictor stays restricting initial opening

to 100mm and trickle ventilators. Toughened glass will be proposed for any full height window openings. The proposed window U-value will meet technical building standard requirements as a minimum, and most likely adopt lower (improved) U-value targets as the detail of the housing typology emerges.

Doors

Where required, solid-cored certified fire doors with smoke and intumescent seals in frames to achieve FD60 S or FD30 S fire resistance to suit location will be provided. The proposed door U-value will meet technical building standard requirements as a minimum, and most likely adopt lower (improved) U-value targets as the detail of the housing typology emerges.

Floors

Proposed ground floor construction will be subject to on site ground investigations and Structural Engineers' recommendations but may typically consist of a screeded in-situ concrete floor slab on rigid insulation on DPM on blinding on upfill.

The construction of separating floors may differ depending on the height and construction of the external walls, however all separating walls will provide a sound reduction of 56 L'nT,w maximum for impact sound, 56 DnT,w minimum for airborne sound.

9.6 Masterplan Delivery - Indicative Phasing

9.6.1 Phasing Strategy

An indicative phasing strategy has been produced to support the Herdmanflat Masterplan. The Herdmanflat Hospital Site is a significant development which is expected to be built out over a four to five year period. The masterplan sets the framework within which the former hospitals development must be taken forward, with the detail being agreed through more detailed applications at a later stage.

The phasing of development is a critical part of the future developments success and the phasing principles have had to consider a number of influencing factors:

1. Phasing would be required to support future drawdown of East Lothian Council Housing Revenue Account Budgets and Scottish Government Housing Grant applications. It would be unlikely that the funding required to build the development in a single phase would be available and would need to be planned over a number of financial accounting periods.
2. All phases require to be served by appropriate infrastructure such as roads, utilities, drainage, and car parking.
3. Construction access should be limited to Aberlady Road throughout the build to limit nuisance and traffic disturbance on Lydgait. This was a key concern raised through consultation.
4. Access and egress would be required to serve development sites as they are completed. With the Aberlady Road entrance reserved for construction access, this might require temporary car use of Lydgait for a period of time to allow the development to be completed with minimal upheaval.
5. The proposed housing is for older people, perhaps living with dementia, and there are plans for a small amount of more specialist housing component

that meets the needs of those living with more complex conditions such as a learning disability. The phasing needs to recognise that fuss, noise, and neighbouring construction activity can be intrusive to those that occupy the earlier completed phases, and that this needs to be minimised.

6. Health and safety considerations require to be followed at all times, and there are a number of buildings that give cause for concern regarding their ability to maintain safe pedestrian and car access during construction. This is likely to be most prevalent in the listed buildings, with adequate space for scaffolding, construction traffic movements and contractor accommodation required. This is another principal reason for opting for a solution that retains the existing Aberlady Road entrance for construction traffic and materials delivery only.

An indicative phasing strategy has been developed that addresses all of the considerations outlined above.

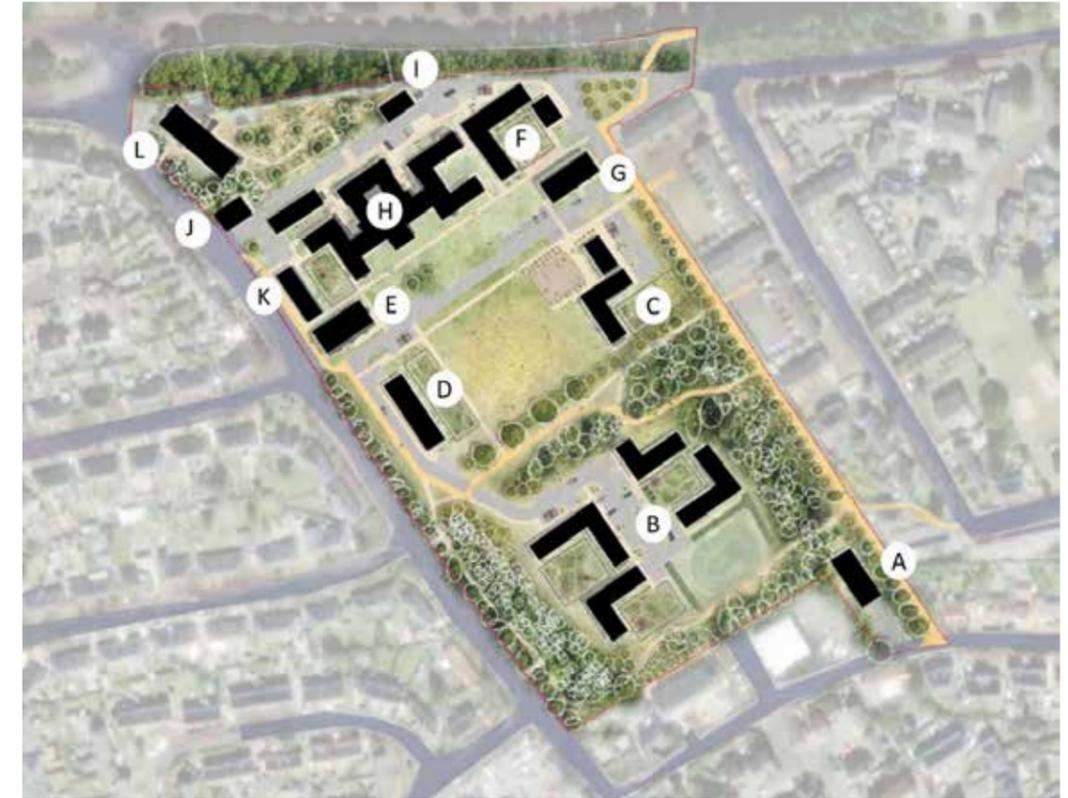
9.6.2 Development Plots

The accommodation schedule opposite provides an indicative number of units identified across the 12 sites (A-L) that the development seeks to deliver. The proposed indicative numbers reflect discussions held with the Council's Housing Strategy team as being the likely type of housing mix required to meet known demands and the likely needs of the rising ageing population.

Sites have been grouped together to allow a phased approach to be developed that minimises disruption to surrounding neighbours, minimises the impact of construction on new tenants, and supports a phased drawdown of future budget that can allow development to be delivered with certainty over the short to medium term.



Concerns were raised by the public at consultation about new cars entering and leaving the site at Lydgait. This has been addressed by limiting Hopetoun Mews to an active travel route only, as well as limiting construction vehicle access to the Aberlady Road entrance only.



Phase	Site	Name	Type	Units	Phase Cum.	Construction Access	Temporary Access & Egress (once occupied)	Final Access & Egress
1		Enabling Work	Roads/ Infra	0		Aberlady Road	None Required	None Required
2	A	Hopetoun Mews	New Build	6		Aberlady Road	Lydgait	Lydgait
2	B	Southern Zone	New Build	47	53	Aberlady Road	Lydgait/ Herdmanflatt	Aberlady Road/ Herdmanflatt
3	C	Central East	New Build	12		Aberlady Road	Herdmanflatt	Aberlady Road/ Herdmanflatt
3	D	Central West	New Build	8		Aberlady Road	Herdmanflatt	Aberlady Road/ Herdmanflatt
3	E	Pencaig	Refurb	8	28	Aberlady Road	Herdmanflatt	Aberlady Road/ Herdmanflatt
4	F	Northern East	New Build	19		Aberlady Road	Herdmanflatt	Aberlady Road/ Herdmanflatt
4	G	Lammerlaw	Refurb	8	27	Aberlady Road	Herdmanflatt	Aberlady Road/ Herdmanflatt
5a	H	Main Buildings	Refurb	30		Aberlady Road	None required	Aberlady Road/ Herdmanflatt
5a	I	Energy Centre (serves refurb only)	Infra	0		Aberlady Road	None required	Aberlady Road/ Herdmanflatt
5a	J	North Lodge	Refurb	1		Aberlady Road	None required	Aberlady Road/ Herdmanflatt
5b	K	Northern West	New Build	6	37	Aberlady Road	None required	Aberlady Road/ Herdmanflatt
2 - 5b	L	Garleton (non-housing)	Refurb	0		Aberlady Road	Herdmanflatt	Aberlady Road/ Herdmanflatt
			TOTAL	145	145			

Proposed accommodation schedule which will be developed further and confirmed at detail design stage of the development

9.6 Masterplan Delivery - Indicative Phasing

9.6.3 Determining the Phasing

The table on the previous page indicates how the 12 sites might be grouped together to form five deliverable phases that allows construction to start in the southern part of the site and gradually work northwards back towards the Aberlady Road entrance.

Site L, the Garleton Building, could be delivered at any time between Phase 2 and phase 5, however this is dependent on the point that the new proposed Herdmanflat entrance and energy centre are completed.

This phasing overview is provided first and foremostly to demonstrate that the Herdmanflat site can be delivered effectively over a five year period, however, this does not reflect in any detail the potential for overlapping of phases which would speed up development, subject to the availability of funding.

It is anticipated that each phase will be the subject of its own detailed planning application. This will allow future applications to be developed to meet any relevant or changing needs that arise over the short to medium term. All phases (and subsequent detailed applications) will be developed in line with the principles established within the approved Masterplan framework.

9.6.4 Site Infrastructure Delivery

The first phase of development will involve constructing a significant amount of site wide infrastructure which will be quantified as part of the first detailed planning application. Funding constraints are likely to limit the delivery of infrastructure to what is absolutely necessary to facilitate development on a phase by phase basis, but it is anticipated that elements of site wide infrastructure i.e. beyond what is required for Phase 2 solely, will need to be provided as part of the Phase 1/ Phase 2 enabling works. The infrastructure required to support the first phases will most likely include:

- New utilities supplies including a new LV electrical supply taken from the existing HV substation located to the south of the site.
- Required elements of the sustainable urban drainage system to include the SUDS pond and Scottish Water access arrangements.
- Connections to the wider (off site) Foul and Surface Water drainage system.
- Upgrades to existing roads and street lighting where identified.
- Provision of new roads and access where required to include ducting that serves future phases, (utilities, street lighting, EV charging and communications)
- Earthworks required to deliver a stable build platform and road routes.
- Establishing new pedestrian access points from Aberlady Road that will provide access to each phase and the Active Travel / path network as this is completed. Completion of the southern zone in the first phases will allow pedestrian access to the woodland walks in the shortest possible time.

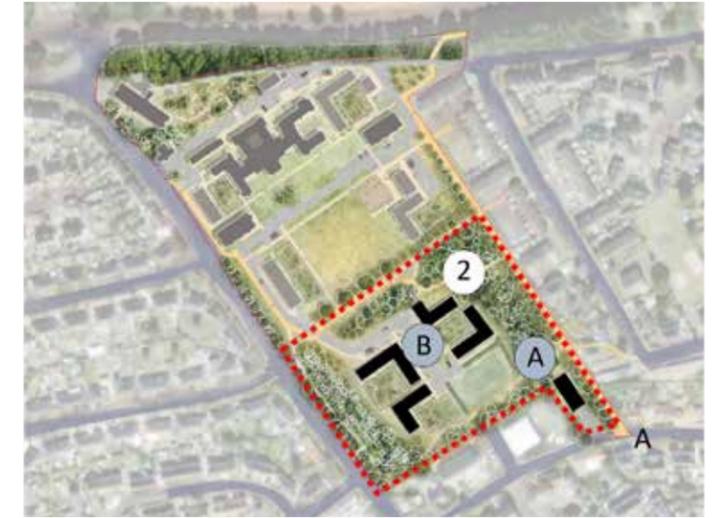
9.6.5 Indicative Phased Delivery

The diagrams opposite indicate how the infrastructure; new build housing sites and proposed refurbishment sites can be delivered in a methodical way from south to north. This approach, (or similar, subject to detail), would allow the main Aberlady Road entrance to be utilised solely for construction purposes throughout the build period, with temporary access for cars required from Lydgait to service the southern zone (Phase 2) until the new Herdmanflat entrance and Phase 3 are complete.

The phasing proposals have been carefully considered and there are no technical reasons to prohibit such a strategy from being delivered.



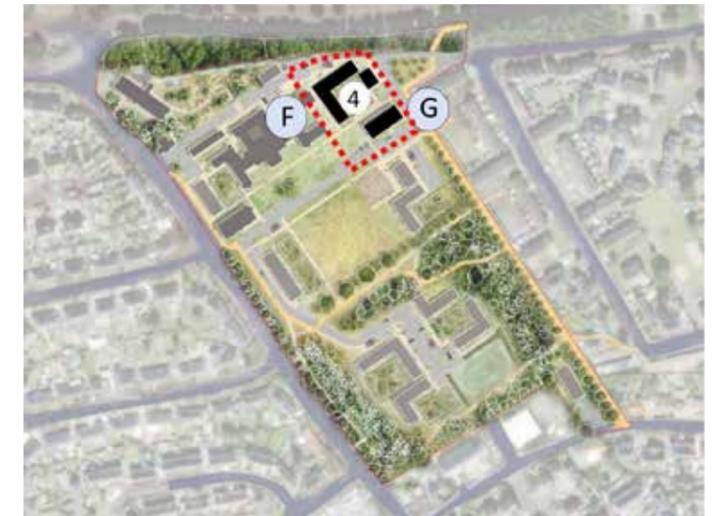
Phase 1 - Infrastructure 2024-2025



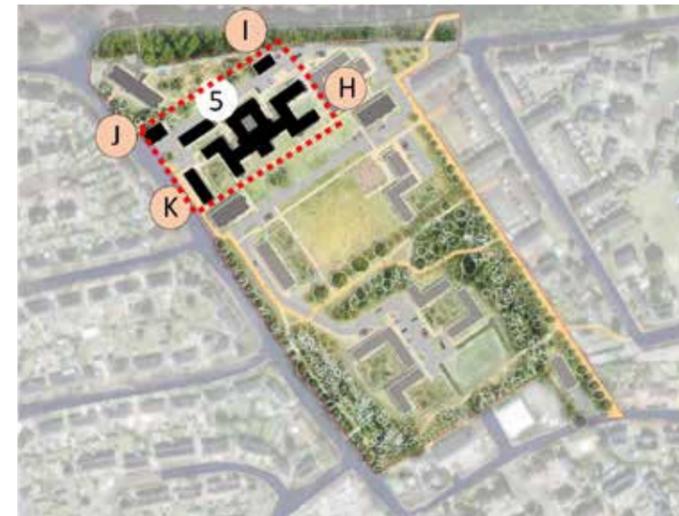
Phase 2 - Housing 2024-2026



Phase 3 - Housing 2025-2027



Phase 4 - Housing 2026-2028



Phase 5 - Housing 2027-2029



Phase 6 - Garleton Building (Community) - 2026-2029

SECTION 10

Appendix

Volume 2 - Delivery

- 10.1 NPF4 Policy Alignment Checklist
- 10.2 Transport Assessment
- 10.3 Ecological Appraisal Report
- 10.4 Drainage Strategy Plan
- 10.5 Flood Risk Assessment
- 10.6 Pre-Application Consultation Report
- 10.7 Landscape Visual Appraisal
- 10.8 Proposed Energy Strategy
- 10.9 Policy and Planning Context
- 10.10 Heritage Statement
- 10.11 Interim Report on Site Investigations
- 10.12 Tree Survey
- 10.13 EIA Screening Report