

NORTH STANEY HILL MASTERPLAN, LERWICK, SHETLAND

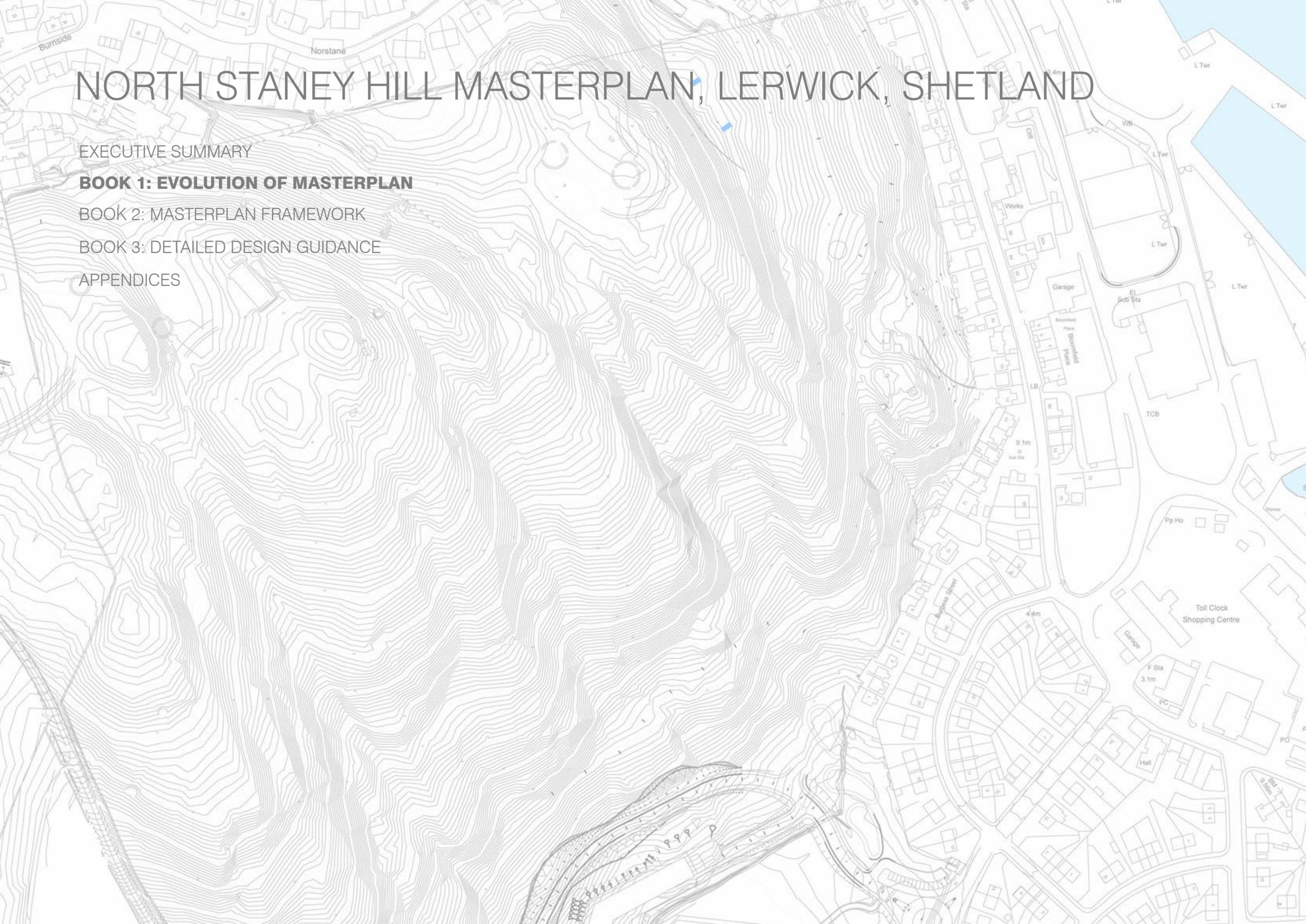
EXECUTIVE SUMMARY

BOOK 1: EVOLUTION OF MASTERPLAN

BOOK 2: MASTERPLAN FRAMEWORK

BOOK 3: DETAILED DESIGN GUIDANCE

APPENDICES





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TEAM**

In order to provide clarity and assist in the understanding of the three design books the following content is repeated across the three books. A description of the sections within each book, in this case **Book 1: Evolution of the Masterplan** is included identifying how each of the sections contribute to the design and development process.

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STANEY HILL



1. INTRODUCTION

The purpose of this Masterplan Framework Document is to discharge conditions relating to a planning permission in principle for proposed housing in North Staney Hill, Lerwick. The conditions require the production of a masterplan that indicates a detailed design for new development that:

- makes a positive contribution;
- maintains the identity and character of the area; and
- ensures a safe and pleasant environment.

Introduction to Site

- 1.4 The application site sits to the south of the residential area of Staneyhill and to the north of a mixed use area that comprises Lerwick's new high school (see chapter 2). It covers an area of ridges, peaks, valleys and peaty moorland that extends south west (*see figure 1*).

Introduction to Masterplan

- 1.5 The masterplan primarily provides for residential development with associated landscaping, roads and infrastructure works. In addition to new housing, office space is proposed within the southern section of the site. The design principles established through the development process are set out in chapter 7 while detailed codes and parameters for the scheme are described in greater detail within chapter 9.

The Vision

- 1.6 This section sets out a vision for the Staney Hill area and the key design principles that have guided the development of the proposals. It explains how the masterplan ensures that new development will make a positive contribution, maintaining the identity and character of the area, ensuring a safe and pleasant environment. It describes how the masterplan will provide the basis for a development that is sustainable and connected and will offer a desirable location for living, working and growing. It answers the question: What sort of place will Staney Hill be?

Scope and Structure

1.7 BOOK 1 - EVOLUTION OF MASTERPLAN

- **Chapter 2 - Understanding the Brief:** Setting out the original parameters for the site based on both the council's tender document and the client's requirements.
- **Chapter 3 – Understanding of Site and Context:** shows an appreciation and understanding of the site within its physical and historical context, identifying a series of key features both site-based and contextual.
- **Chapter 4 – Analysis of Lerwick Housing Design:** The design team has reviewed a range of housing across Lerwick in this chapter a reference palette of housing designs, public realm treatment and materiality.
- **Chapter 5 – Constraints and Opportunities:** the constraints and opportunities that derive from the original brief and the design team's assessment of the site, providing the foundation for the site's design.
- **Chapter 6 – Design Journey:** documenting the journey taken by the design team that has allowed for the emergence and refinement of a series of key principles for the site, highlighting the impact of engagement with the public and A&DS.
- **Chapter 7 – Design Principles:** Establishing a series of key design principles for the masterplan framework based on an understanding of the brief and site and through testing that understanding at consultation during the design journey

1.8 BOOK 2: MASTERPLAN

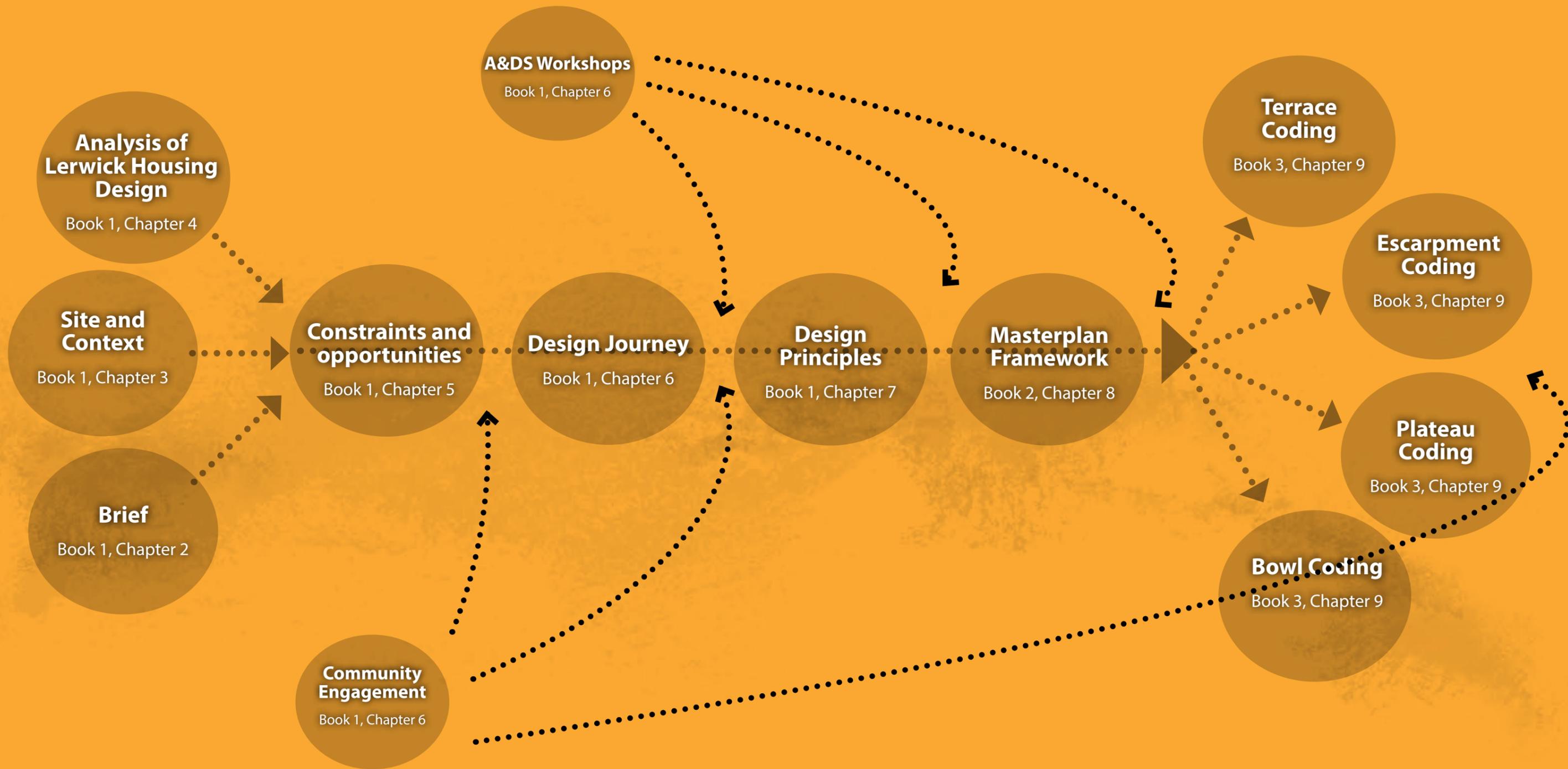
- **Chapter 8 - Masterplan Framework:** presenting the site in a series of layered plans to identify the key character areas, landscape structures, SUDs provision and movement structure for the site, indicating how the development responds to the wider built form and landscape character and links into the movement network

1.9 BOOK 3: CODING

- **Chapter 9 – Detailed Design Guidance:** setting out a series of codes and parameters for each of the masterplan character areas, including street types / hierarchy, open space provision, edge treatment and frontages, amongst others.
- **Chapter 10 – Delivery:** indicating the key deliverables, timescales and milestones for a phased delivery of the development.

- 1.10 This report should be read in conjunction with the rest of the Staneyhill submission documents.

1. INTRODUCTION



1. INTRODUCTION

BRESSAY

MAREEL

TOWN CENTRE



SITE

1. INTRODUCTION

NORTH LOCHSIDE

NEW HOSTEL

**CLICKIMIN LEISURE
CENTRE**

NEW HIGH SCHOOL

CLICKIMIN BROCH



2. UNDERSTANDING THE BRIEF

CLIENT'S REQUIREMENTS: HJALTLAND HOUSING ASSOCIATION LTD

2.1 The client expected the site to accommodate over 300 units of which 70% should be for social rent, 15% for Low Cost Home Ownership and 15% for private ownership. It is expected that the project will be developed over a number of phases with each phase consisting of approximately 40 units.

2.2 In order to meet the demand profile for Lerwick the housing mix for social rent and LCHO should consist of;

Property Type	% Mix
2 Person Flats	40%
3 Person Houses	35%
4 Person Houses	15%
5 Person Houses	7%
> 5 Person Houses	3%

2.3 The actual housing mix will be agreed prior to the works on each individual phase commencing.

2.4 The layouts and numbers for future phases are for us to present, although it was anticipated that each phase should consist of between 30 and 40 units.

2.5 The overall development includes significant external and infrastructure works with substantial civil engineering solutions required to provide an adoptable road network to service the housing development.

2.6 It was also a requirement to consider how land will be allocated for open space and community use. The successful consultant should also consider whether the site has potential demand for commercial or community ancillary buildings.

2.7 The client was seeking to develop a new office on the site as part of the development and this should be incorporated into the overall vision of the site.



GENERAL

2.8 Of particular importance to the client is the long term performance of each building; energy efficiency and future maintenance should be a relevant factor in each design as should its location in terms of extremes of frost, driven rain and wind. Of equal importance is the visual appeal of the property/scheme and the extent to which the choice of materials and the general layout enhance the quality of the final product and the extent to which it matches the present and future requirements of its occupants.

2.9 The client is also committed to the development of sustainable approaches to housing design and specification.

site developed, over a 10-15 year period, to realise 300+ homes, social and private.

2.11 The client was looking for consultants to embrace their knowledge of social housing development, master-planning and integrate within this the private housing elements of the brief. The client was also looking for a modern, innovative interpretation of the brief to provide an affordable solution for the North Staneyhill development.

2.12 We were responsible for taking this project forward from the existing Planning Permission in Principle through to approval of a phased Masterplan.

DESCRIPTION OF PROJECT

2.10 It is hoped that the project will set the standard for new housing developments in Shetland for years to come. The client requires consultants and their design teams to think in accordance with the latest National Planning Policy Guidelines, Planning Advice Notes (PAN 83: Master planning), SIC Local Development Plan 2014, A Place Standard for Scotland Guidelines, etc. and produce a masterplan for the development. This should incorporate house types that will fully embrace Housing for Varying Needs and the Sustainable Housing Design Guide. The client is looking forward to working with the consultant to develop a masterplan which will see the

- Identify land for the development of 300 new mixed tenure homes.
- Set out adoptable road network for site
- Identify land for Open space and community use.
- Identify site for office development

BRIEF PARAMETERS

2. UNDERSTANDING THE BRIEF

STAKEHOLDER REQUIREMENTS: SHETLAND ISLANDS COUNCIL AND HISTORIC SCOTLAND

2.13 Planning permission for housing development on the Stoney Hill site was granted by Shetland Islands Council on 11 March 2015. 21 conditions were attached to the permission.

2.14 The Council agreed that the site was suitable for development, provided that care was taken to safeguard the environment and heritage on and around the site. A preferred development area was identified; some areas were to remain undeveloped. Views of the skyline from Clickimin Broch were to be protected.

2.15 In response to the original aspirations, reflected in the planning consent, the masterplan should create a series of new neighbourhoods in Lerwick that:

- make a positive contribution.
- maintains the identity and character of the area.
- ensures a safe and pleasant environment.

2.16 A masterplan for the site is to be prepared. It must propose a detailed layout showing where housing will be built; how access for vehicles and pedestrians will be provided; and how the site will be landscaped, including public amenity space. Energy use must be minimised and issues such as water management and boundary treatment must also be addressed. Our task has been to prepare that masterplan.



Figure 2: Plan setting out parameters set out for the site's development dictated by views from the Broch



Figure 1: Sections through the site showing its relationship with the Broch



Figure 3: View from the Broch, August 2017

- Views of the skyline from Clickimin Broch were to be protected.
- Masterplan to
 - make a positive contribution.
 - maintain the identity and character of the area.
 - ensure a safe and pleasant environment.

BRIEF PARAMETERS

3. UNDERSTANDING SITE AND CONTEXT

This section provides a concise description of the site, its context, its features and its character. In each topic area, it explains the constraints that had to be considered in developing the design.

Strategic and Local Context

STRATEGIC CONTEXT

- 3.1 Stoneyhill sits at the north west edge of Lerwick, Shetland. The site is approximately 25 hectares of mainly heather moorland at the eastern end of a local hill / ridge-line which continues south west around the western edge of Clickimin Loch, providing a backdrop to the wider townscape of Lerwick from the west.
- 3.2 South east of the site is the main centre of Lerwick whilst to the north are residential suburbs of the town. Immediately to the east is a thin slice of residential development, beyond which is the main harbour. To the south lie the new Anderson High School and hostel and, beyond them, Clickimin Loch, playing fields and the local leisure/sports facilities of the Clickimin Leisure Complex.

LOCAL CONTEXT

- 3.3 The site is currently bound by:
 - To the north and east of the site, there are established areas of housing. The northern sector consists mostly of Council (or ex-Council) and Hjaltland Housing Association developments. In the east, along the North Road, there is a ribbon of older, private housing.
 - To the south, the lower-lying land around the Loch of Clickimin has, over recent decades, been mostly devoted to leisure uses and informal open space, but is now also the site of the new Anderson High School and its hostel.
 - To the south-west, there is steeply-sloping moorland and the Stoney Hill road, a track bounded by stone walls that is a popular route for walkers

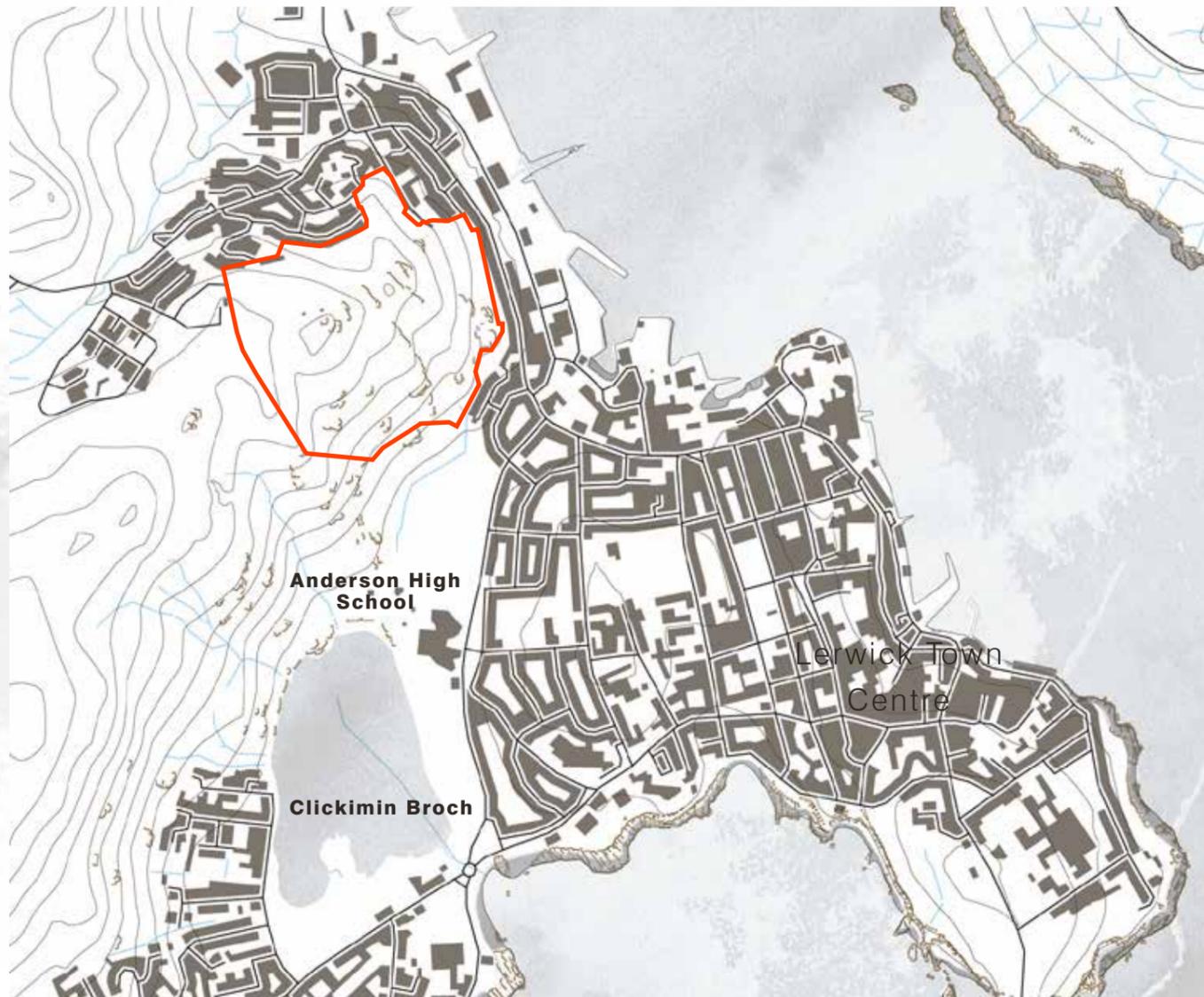


Figure 4: Urban Grain



Figure 5: Local Plan

Housing areas bound the north western, northern and eastern edges of site with education and recreation uses along its south eastern edge.

KEY FEATURE

3. UNDERSTANDING SITE AND CONTEXT



Figure 7: View from North Lochside



Figure 8: View from track leading to Broch



Figure 9: View from ferry arriving into Lerwick



Figure 10: View from site looking south



Topography

- 3.4 The site is rural in character with the land form of the site being relatively steep, the majority of the land falling at 1:6 or steeper. In between, there are shallow gullies which run down steeply to the flatter ground next to the sports pitches, and flatter areas of the new high school and hostel which level out at shallower gradients of 1:12 to 1:20.
- 3.5 The plan classifies the site by the steepness of the slopes. The darker the shading, the steeper the terrain. Some gradients are steeper than 1 in 6 (i.e. a 1 metre rise in six metres). Elsewhere, slopes are much gentler: 1 in 20 or less. The orange dashed lines on the plan show the shallow valleys that run from north to south across the site.

Shallow valleys cutting south east across the site slopes steeply at its eastern end, at the end of the ridge line cutting into the site from the west.

KEY FEATURE

3. UNDERSTANDING SITE AND CONTEXT



Figure 11: Plans showing views from the site

Visual Character

VIEWS FROM SITE

3.6 There are excellent views from the site, particularly towards the north-east, east and south. The panorama includes all of Lerwick, its harbour and Bressay. However, there are areas in the northern part of the site where the outlook is limited by the landform and existing housing.

3.7 The landscape is essentially one of moorland.



Figure 12: View looking south across to Lerwick Town Centre from the south eastern area of the site

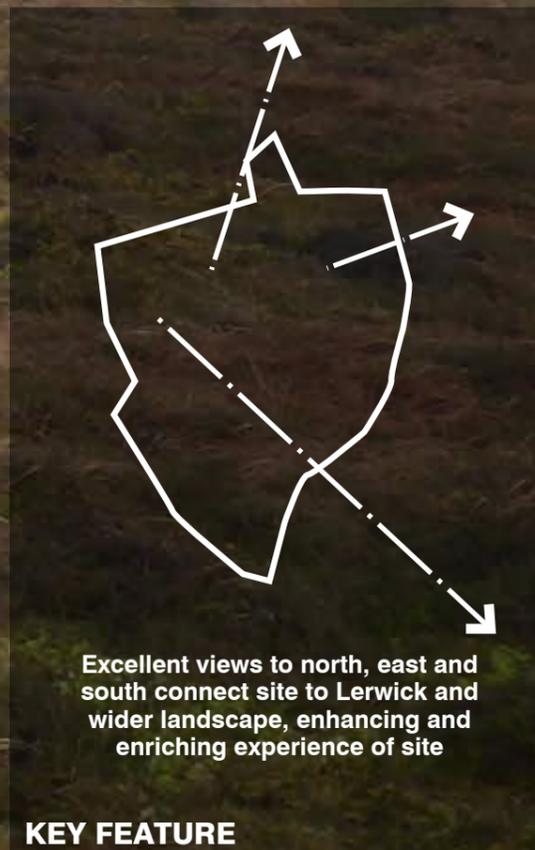


Figure 13: View looking south across the adjoining playing fields along the southern edge of the site



Figure 14: View looking north east at the residential edge and industrial development beyond

3. UNDERSTANDING SITE AND CONTEXT



Excellent views to north, east and south connect site to Lerwick and wider landscape, enhancing and enriching experience of site

KEY FEATURE

Figure 15: Zoomed in portion of figure 12

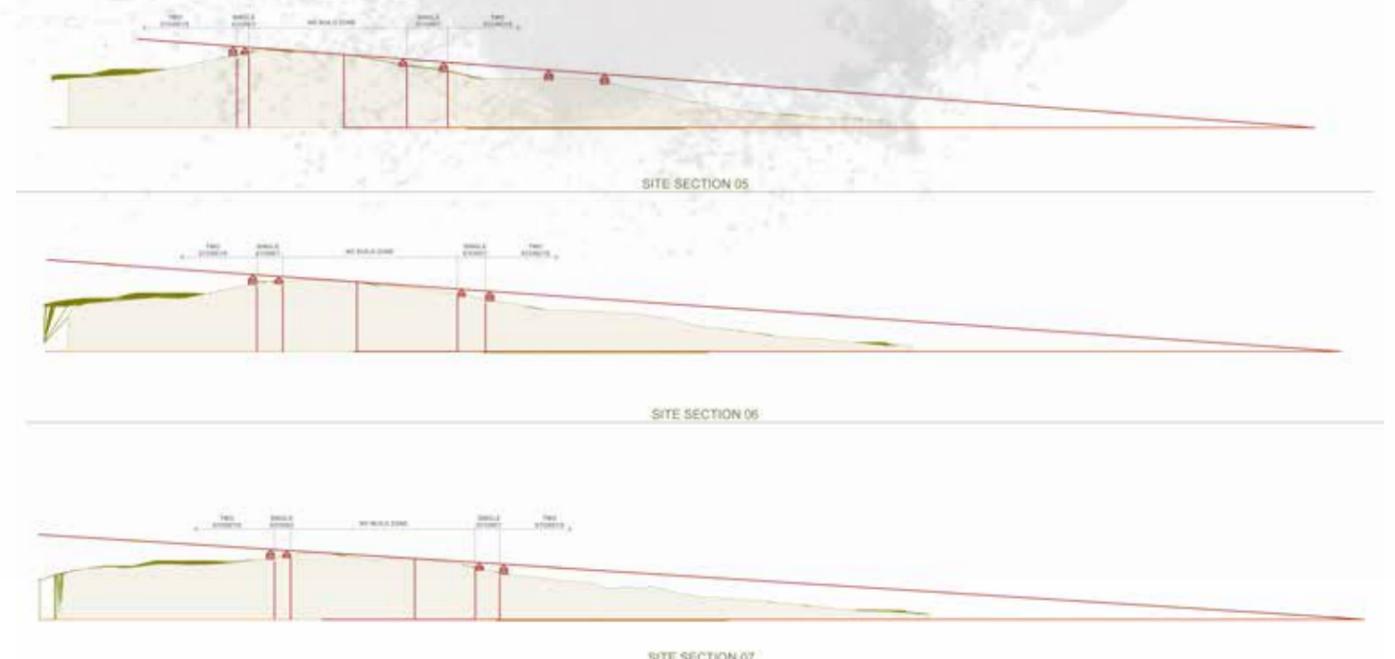
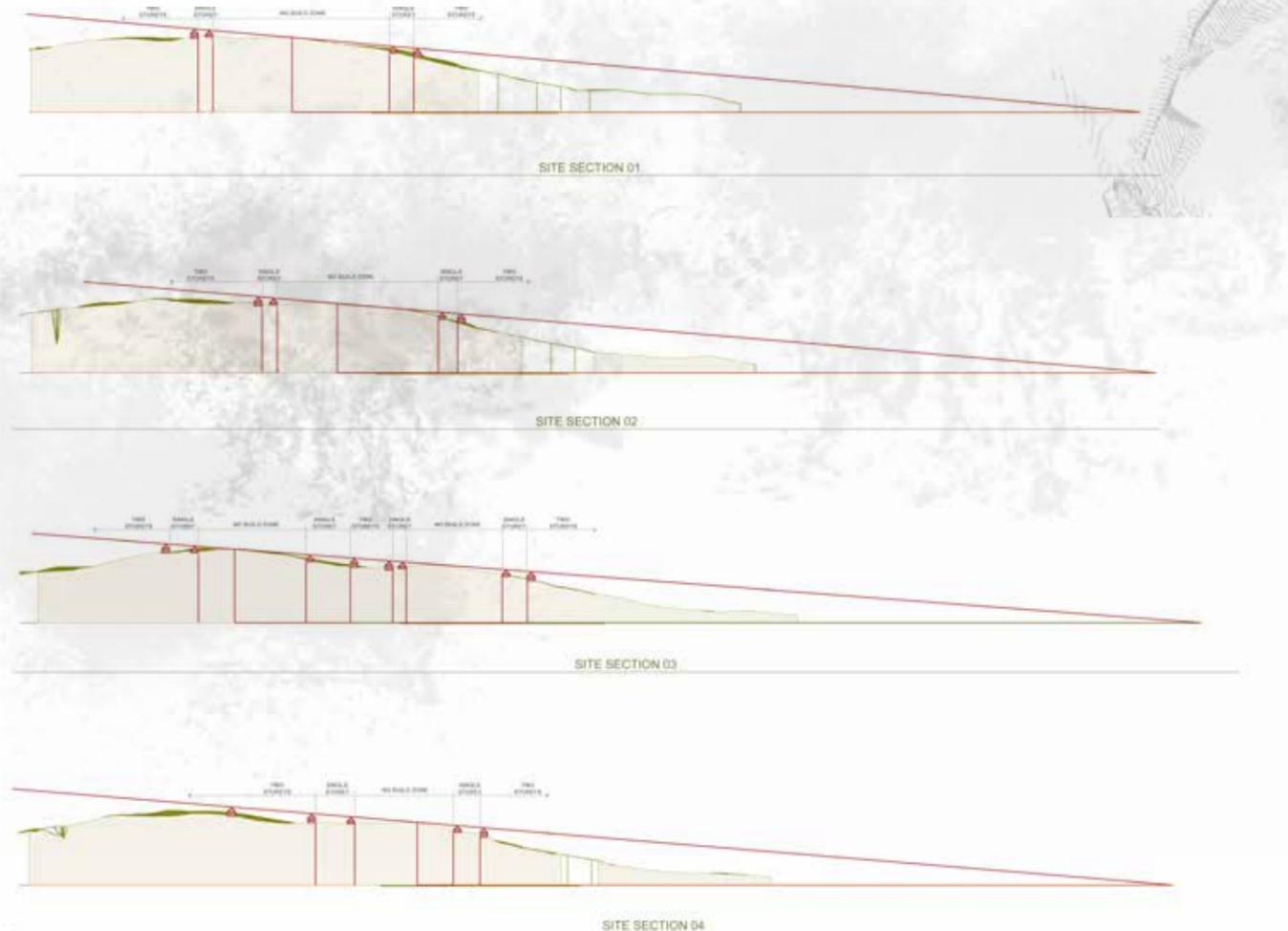
3. UNDERSTANDING SITE AND CONTEXT

VIEWS FROM THE BROCH

3.8 As noted in the 'Understanding the Brief' chapter, one of the main constraints already established for the site's development relates to the visual relationship it has with the historic Broch. The design team has explored this relationship with a series of sectional profile images shown below; these give an impression of how far development can extend south from the northern edge of the site and north from the southern edge of the site.



Figure 16: Plan showing the sectional slices taken through the area between the site and the Broch, some of which are shown below



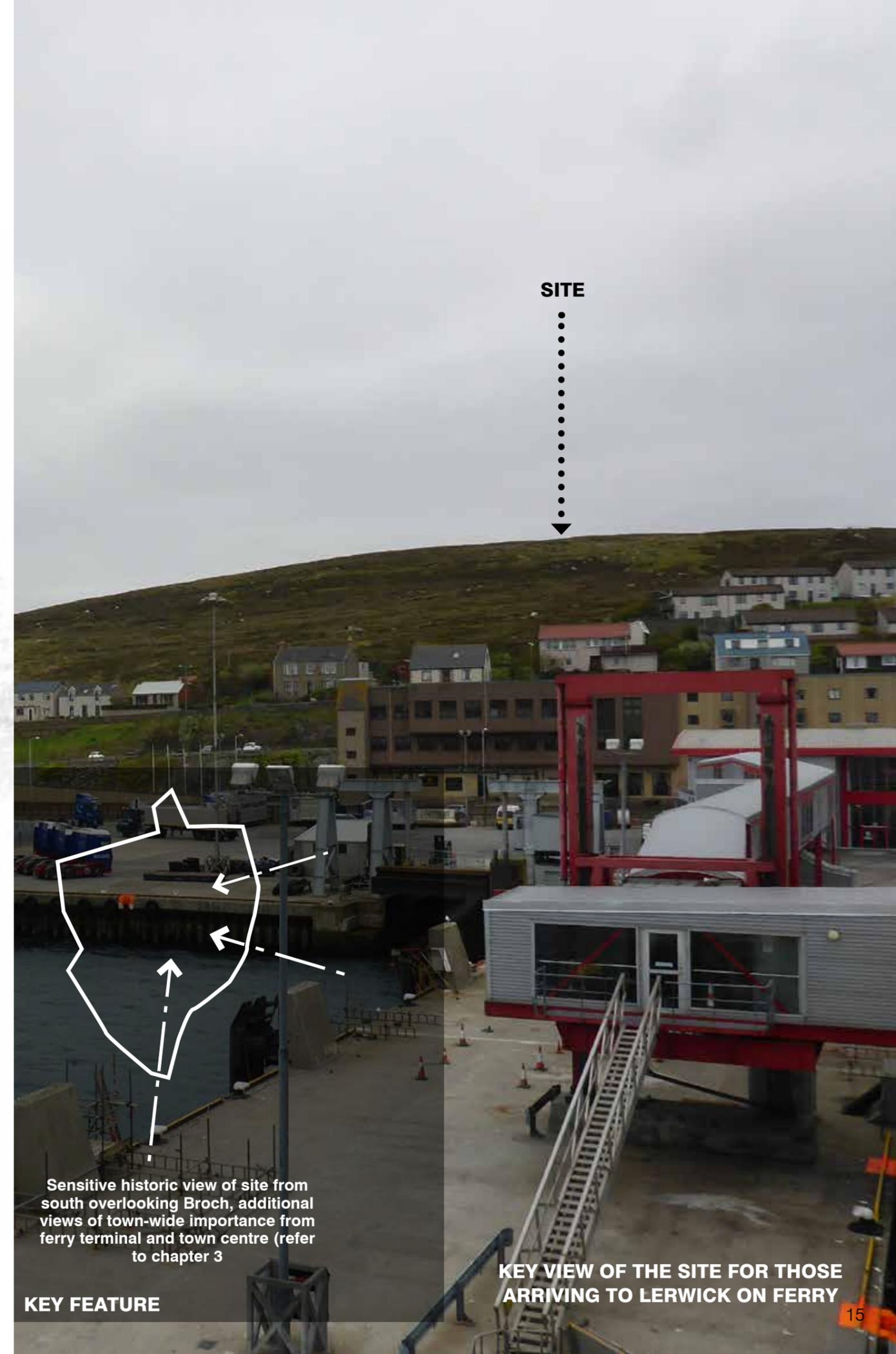
3. UNDERSTANDING SITE AND CONTEXT

ADDITIONAL VIEWS TOWARDS SITE

- 3.9 The site is composed of a number of areas of differing character. Seen from the south, it presents steep and, in places, rocky slopes rising from the lower land around the loch; these slopes are cut by several steep-sided valleys separated by ridges.
- 3.10 The escarpment continues to the east, above the houses on North Road. The higher ground to the north-west is composed of undulating, peaty moorland.



Figure 17: Views and Viewpoint pressure



Sensitive historic view of site from south overlooking Broch, additional views of town-wide importance from ferry terminal and town centre (refer to chapter 3)

KEY FEATURE

KEY VIEW OF THE SITE FOR THOSE ARRIVING TO LERWICK ON FERRY

3. UNDERSTANDING SITE AND CONTEXT

Landscape

LANDSCAPE CHALLENGES

3.11 The challenges of the Staneyhill landscape, challenges that are at the heart of the masterplan and have been derived from the physical form, the community engagement and from the client design brief, include the following;

- Realising a new 300 house community whilst retaining the landscape and character of place that make Staneyhill unique.
- Retaining and managing in perpetuity the existing heather moorland, bog and grassland that, whilst not unique, combine with slope, geology and location, to provide a unique asset to those who live close to the site and the wider catchment of Lerwick.
- Working with the geology and topography of hard rock, steep slopes and exposed landscape, whilst creating a real community.
- Working to maintain the existing physical and visual relationship with the main centre of Lerwick, as identified in the community engagement.
- Creating a 'liveable place' within the environmental constraints of the orientation and exposure of the site.

LANDSCAPE TYPES

3.12 In the summer of 2016 a report was commissioned by Redman Sutherland Architects (now Malcolmson Architects), from the Shetland Biological Records Centre, to map and identify the vegetation of Staney Hill. In vegetative terms the site is comprised of dry heath land punctuated by varying amounts of acid grassland, with smaller pockets of blanket bog and a few acid flushes. The lack of, or low levels of, grazing in recent years means the site looks in very good condition, with luxurious flowering heather (*Calluna vulgaris*) and abundant Crowberry (*Empetrum nigrum*). The surface vegetation is very much a product of soil depth. There is frequent outcropping of rock at the surface on the steeper slopes and here the soil is shallow with dry heath land and acid grassland dominant. Smaller pockets of blanket bog occur where a reasonable depth of peat has developed in shallow basins, valleys and on shallower slopes, and in many places the vegetation is best described as a mosaic of dry heath land and blanket bog. The topography means that there are no large expanses of blanket bog on the site. A series of acid flushes occur on the south and east facing slopes.

3.13 Heather Moorland constitutes the majority of the Staneyhill site, and is visually and physically the prominent identifier of the place, particularly on the higher south-east facing slopes and on the hill top, frequently forming a mosaic with acid grassland. *Calluna vulgaris* (heather) is dominant but damper areas have varying proportions of *Eriophorum angustifolium* (cotton grass) among the heather and



Figure 18: Plan showing the key vegetation types across the site



Figure 19: Image showing mix of grass and heathland across site



3. UNDERSTANDING SITE AND CONTEXT

Sphagnum capillifolium and occasionally Sphagnum papillosum is also present. The heather is quite leggy and hummocky by Shetland standards and the heathland relatively herb poor but with an abundant cover of hypnoid mosses – notably Hylocomium splendens, Pleurozium schereberi, Rhytidiadelphus loreus and Rhytidiadelphus squarrosus. Nardus stricta (mat grass), Juncus squarrosus (heath rush) and Festuca vivipara (viviparous fescue) occur commonly in places and Empetrum nigrum (crowberry) is rare to frequent. Thymus polytrichus (wild thyme) occurs where the soil is

shallow due to bedrock lying near the surface.

- 3.14 A series of lichen-covered boulders are found among the heather and acid grassland on the steeper slopes, with some ferns (young Dryopteris dilatata - broad buckler fern) under some boulders.
- 3.15 Acid grassland occurs in patches throughout the site, generally where the soil is

shallow or the slope steep, but some along the south-eastern face of the hill may be a result of heavy grazing in the past removing heather cover. In some areas the acid grassland forms a mosaic with dry heath. In other areas and in particular along the south-eastern slopes it is quite wet in parts, due to flushing and/or water courses (possibly peat pipes) emerging at the surface. These 'flushed' areas are often characterised by patches of Juncus effusus (soft rush) or dense cushions of bryophytes.



NATURAL STONE AND BOULDER OUTCROPS APPEAR ACROSS THE SITE, REVEALING THE BEDROCK CLOSE TO THE SITE'S SURFACE



STONEWALLING PROVIDING A DISTINCT NATURAL EDGE ALONG SITE'S NORTH WESTERN BOUNDARY



LANDSCAPE STRIP SEPARATING SITE FROM DOMESTIC LANDSCAPE OF NEIGHBOURING GARDENS



DOMESTIC GARDEN PLANTING EDGE CONTRASTING WITH RUGGED SITE LANDFORM ALONG SITE'S SOUTH EASTERN EDGE

3. UNDERSTANDING SITE AND CONTEXT

- 3.16 Several small areas of blanket bog (mire) vegetation occur across the site – the majority on flatter areas at the top of the shallow valleys running north-west to south-east down the slope. The most extensive area, though, borders the housing development on the north side of the site. These areas are generally dominated by Eriophorum (cotton grass) or more typically Eriophorum and Calluna (heather). Sphagnum cuspidatum carpets occur in some areas where the water table lies at the surface, and Sphagnum papillosum and Sphagnum capillifolium also occur. Some of these areas of mire vegetation merge into acid grassland as they move downslope as it appears that underground water courses (possibly peat pipes) take water away from the surface.
- 3.17 The northern fringe of the site is where the dominant landscape elements of Staneyhill, rough heather moorland and grassland, are invaded by the semi-ornamental overspill from the gardens of houses along Burnside and Norstane roads: the 'spill'.
- 3.18 The taller form of the shrub planting provides setting and enclosure, protection and environmental enhancement to house and garden.
- 3.19 The eastern edge of Staneyhill is predominantly grassland, freckled with heather and bog. However this edge of Staneyhill is also characterised by the ornamental fringe from houses along the Old North Road, and significantly substantial tree and scrub planting around the WWII bunker site, approximately halfway along the boundary. This vegetation is valued by the community and has been identified as a key aspect of the Staneyhill landscape, for enhancement or extension.
- 3.20 The landscape at the western and north western edge of the site is heathland but it is also defined by the existing drystone walling, which in conjunction with the development at Pegasus Place presents a 'hard' boundary to the site at this particular juncture.



**COMMUNITY WOODLAND
PLANTING ALONG
STRETCHES OF SITE'S
WESTERN EDGE WITHIN
THE GREEN CORRIDOR.**

The site comprises a corridor of blanket bog across its centre and northern section and grassland / acid grassland along the southern and south eastern edges of the site

Domestic landscape edges along northern and eastern edge, clump of tree planting (community woodland) situated at eastern edge of site

KEY FEATURE



3. UNDERSTANDING SITE AND CONTEXT



Figure 20: Geology

■ Peat
■ Sandstone



Figure 21: Geology Map

Environmental Conditions

GEOLOGY AND SOIL

- 3.21 The bedrock at Staney Hill, like that in the surrounding area, is Old Red Sandstone from the mid-Devonian period. There are various outcrops of bedrock and loose boulders at the surface, shown in orange in the map overleaf.
- 3.22 There are also significant areas of peat on the site, particularly towards the north and north-west. The depth of this peat is uneven and generally shallow (20-80cm), varying across the site, occasionally extending to a depth of greater than one metre.

3. UNDERSTANDING SITE AND CONTEXT



Figure 22: Bare Rock Face

BEDROCK OUTCROPPS

- 3.22 The bedrock outcroppings, shown in orange opposite, are particularly significant to both the character and development of the site.
- 3.23 Visually the rock outcrops provide texture and interest across the site, identifying valley edges, spurs and the geological makeup of the local area and wider region.
- 3.24 The depth of rock affects the viability and cost of developing different sectors of the site.



Figure 23: Photos showing examples of bare rock across the site

Rocky outcrops are evident across the site, and provide a key visual and physical resource of the site

KEY FEATURE

3. UNDERSTANDING SITE AND CONTEXT



ASPECT

3.25 Staneyhill is south facing, open and exposed to the elements. The south facing aspect of the site brings positives and negatives with the orientation providing an opportunity to maximise solar gain and views south across the Broch of Clickimin and further south. At the same time the open character of the site means that exposure to the elements is a significant factor in any development of the Staneyhill. Of primary importance in the development of the site is shelter

WIND DIRECTION

3.26 Shetland can be a windy place with average wind speed over the year around force 4 (15mph, or 24kph) and winter speeds up to hurricane force 12. Gales are much less common between April and September, though, and there can be flat calm days at any time of year. The prevailing wind is from the south-west, typically mild and moist, but the higher parts of the site are exposed to all quarters, including cold winds from the north and east and frequent south-easterly gales.

CLIMATE

3.27 Shetland lies in the track of the Atlantic depressions and adjacent to the relatively warm waters of the Slope Current, flowing north along the edge of the Continental Shelf, so the climate is classed as temperate maritime. As a consequence Shetland doesn't experience great extremes of temperature with August generally the warmest month, with a daily average maximum of 15°C. The highest temperatures officially recorded at Lerwick's observatory – which is about 80m above sea level – are just over 23°C. However, in sheltered spots at lower levels, temperatures may well rise into the high 20s on particularly sunny, calm days. Settled spells of weather are unusual at any season, but the sunniest months are April to August.

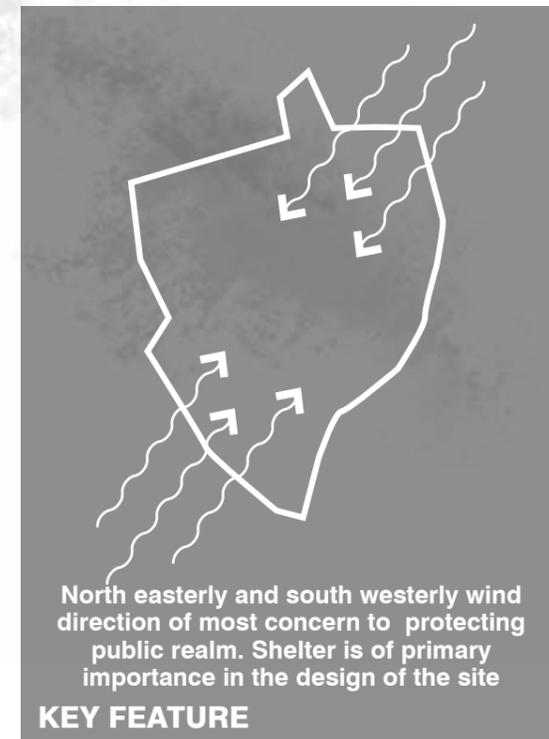
PRECIPITATION

3.28 Rainfall in Shetland averages 1,220mm a year, lower than in many other north-western parts of Britain and less than half the total for Fort William with approximately three quarters of the rain falling in winter. The driest weather is usually between April and August

SUN ASPECT:

-  high
-  medium
-  low
-  very low

Figure 24: Sun Aspect



3. UNDERSTANDING SITE AND CONTEXT



BOUNDARY TREATMENTS - EDGE CONDITIONS

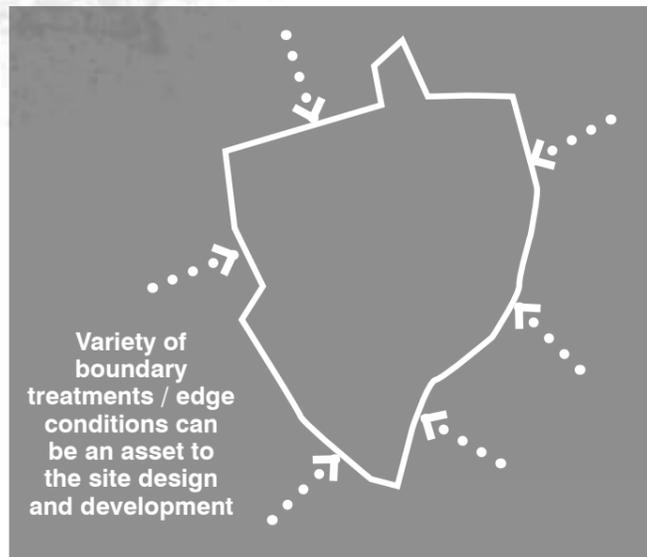
3.29 The ownership boundaries as well as boundaries between rough landscape and architecture offer a huge variety. Ownership boundaries are often individualised, with rendered walls or timber fences. Stone walls are fairly rare in this part of Lerwick, the main exceptions being those on the Staney Hill track. However, towards Staney Hill the rock outcrops increase and create a distinctive identity in the landscape.

3.30 Boundary treatments like stone walls, embankments, concrete walls and excavated rock outcrops often function as retaining walls as well. Ownership can also be defined without vertical structures - just with changes in levels.

Photographs from local area / site interface showing range of boundary / edge treatments



- a. Rendered retaining wall
- b. Bedrock as natural retaining wall and boundary
- c. Small dry stone wall with planted embankment
- d. Stone retaining wall
- e. Timber fencing, with natural bedrock behind
- f. Boundaries through change in levels and fence
- g. Individualised timber and rendered wall fence
- h. Timber fencing on slope
- i. Excavated rock face
- j. Timber fencing
- k. Dry stone wall on site
- l. Low boundary through vegetation
- m. Natural bedrock could potentially function as boundary



Variety of boundary treatments / edge conditions can be an asset to the site design and development

KEY FEATURE

3. UNDERSTANDING SITE AND CONTEXT



Figure 25: Road Network

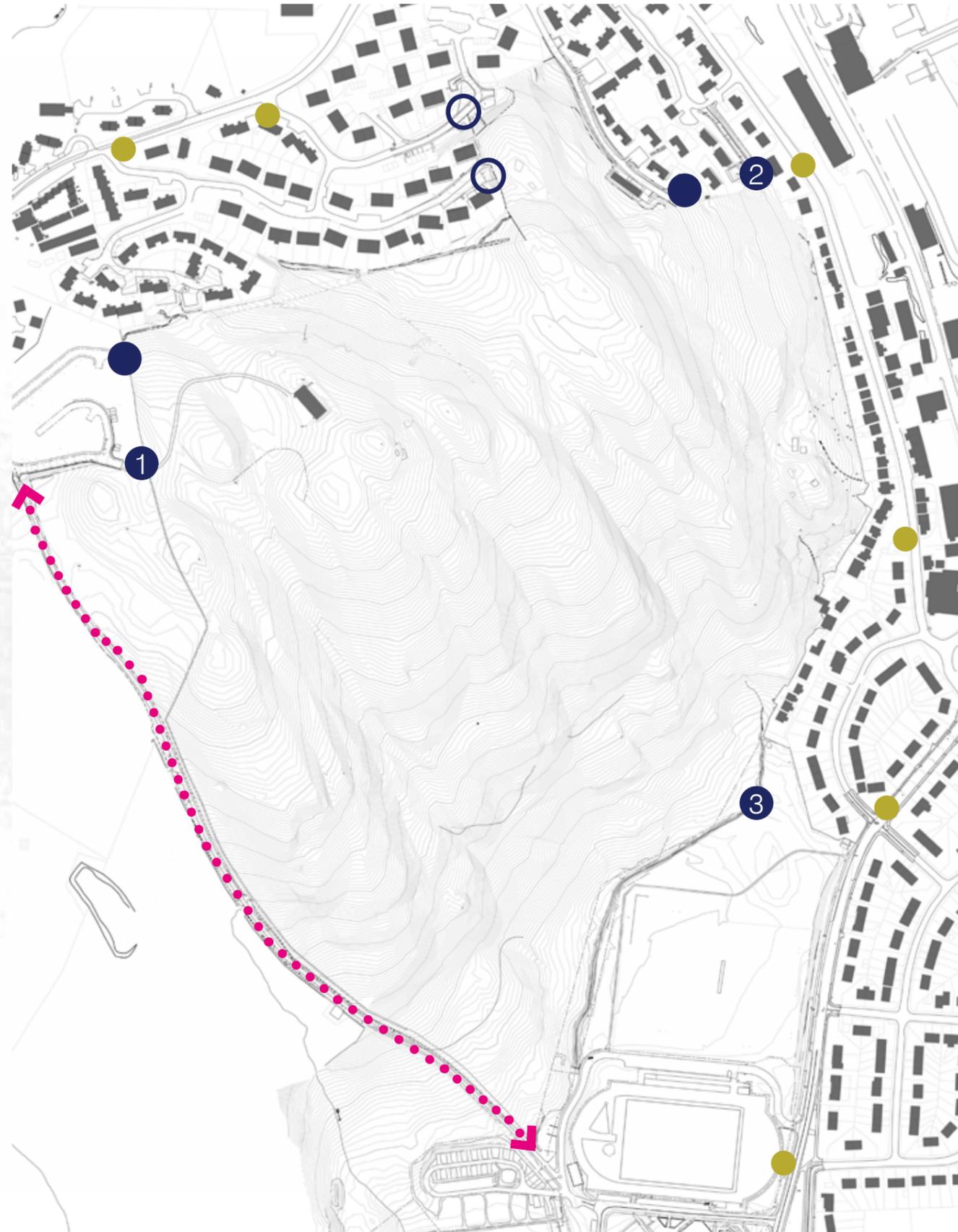


Figure 26: Plan showing access points into site

Access and Movement

3.31 Pedestrian access: There are no formal paths, other than a rough track to the water tank. Although people do walk in the area, some parts of the site are difficult because of steep slopes or bog. The closest paths are the old Stoney Hill road, Cunningham Way and the Clickimin path.

3.32 Vehicle access: The most likely road access points are in the north-west and southeast of the site.

3.33 Bus stops: Bus stops are positioned in various locations including at Hoofield, at the entrance to Pegasus Place and on Lochside.

- Bus Stop
- ◆ Pedestrian Route
- Main proposed Road Access



Number of access points into the site, to residential areas in the north and new high school access road in the south, neighbouring bus routes.

KEY FEATURE

3. UNDERSTANDING SITE AND CONTEXT

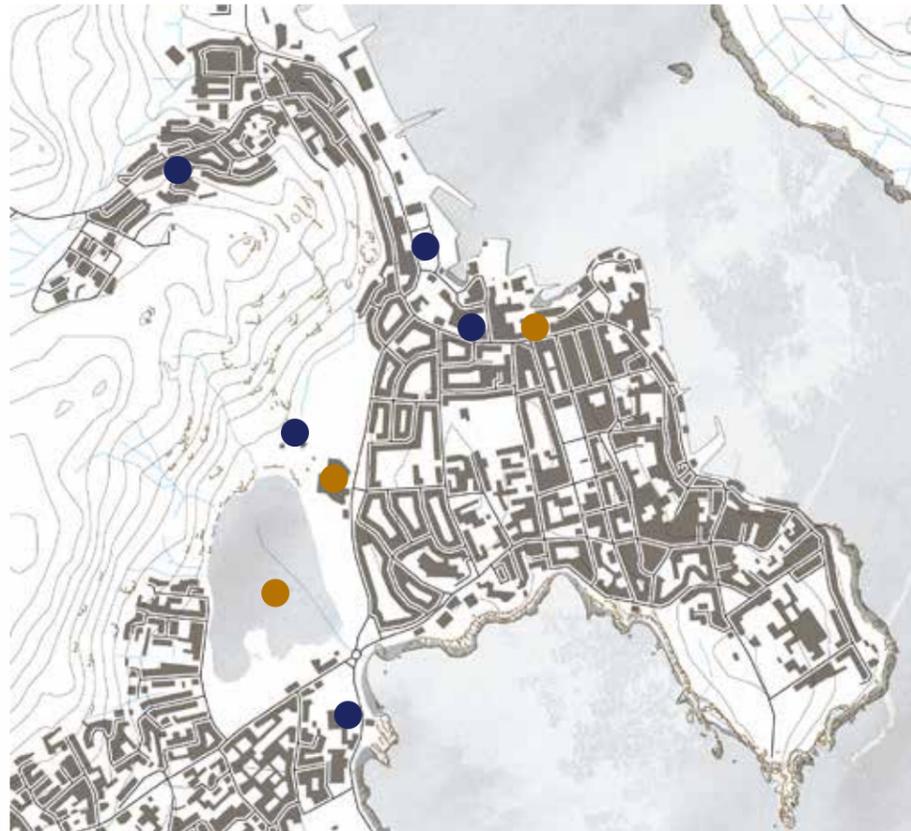


Figure 27: Service and Recreation

- Services
- Recreation



Figure 28: Cultural Connections

- ① Mareel - Music, Cinema and Education Venue
- ② Shetland Museum and Archives
- ③ Wildlife Tours
- ④ Vailla Fine Art
- ⑤ Broch of Clickimin



Figure 29: Landuse

- Recreation and Leisure
- Educational Facilities
- Commercial and Health Institutions
- Tourism
- Residential

Existing Facilities and Land uses

3.34 There are residential areas to the north-west at Hoofield, north along Burnside, Voderview, Norstane and Stoneyhill and east at North Road and Burgess Street. Industrial activities can be found at Stoney Hill and Gremista industrial estates and quarrying activities just off Ladies Drive in the Northwest of the site.

3.35 Sports and leisure activities are situated at the Clickimin Leisure Centre and the associated outdoor facilities which include a running track, rugby grounds and other playing fields. Walkers and joggers use the paths near the Leisure Centre, round the Loch of Clickimin, the track following Stoney Hill Road, Cunningham Way and the quays by the harbour.



Figure 30: Photo showing new hostel development to the immediate south of the High Street Access road

Housing backs onto the majority of the site edge, mixed use sports and education land uses are situated at its southern edge

KEY FEATURE

3. UNDERSTANDING SITE AND CONTEXT

Utilities

SSE

3.36 SSE confirmed in 2014 that there are three existing 11,000 volt circuits close to the site which could be used to supply the scheme. They have indicated approximate routes where they could extend the existing 11,000 volt cables into the area to loop in several secondary sub stations as required. It is likely that 3 substations will be needed and, from these, three interlinking low voltage underground networks would be established to supply the houses. Local reinforcement of the 11,000 volt network may be required depending on final loads and circuits chosen.

BT

3.37 BT confirmed that it has a statutory obligation to service any housing development; therefore there will be a BT connection no matter what the site conditions are.

SCOTTISH WATER

3.38 There have been ongoing discussions with Scottish Water since 2013. Over this period, a strategy has been agreed in principle for the water supply, the surface water treatment and the foul drainage.

WATER

3.39 Although there have been ongoing discussions and a general agreement is in place as yet Scottish water have not provided a final design drawing for the water supply. What we do know is that the existing reservoir on the site will be removed and a new watermain is to be installed which will connect the Sandy Loch water treatment works (WTW) with the existing infrastructure at Staneyhill. After much discussion a preferred route for this watermain, which runs through the development site, has been agreed in principle. We envisage there will be little impact on the development area shown in the masterplan other than the connection through to Staneyhill Road via the new access road.

WASTE WATER

3.40 Sandy Loch WTW currently has sufficient capacity to serve this development, although it will be nearing capacity in the next few years, depending on how much new development takes place within the Sandy Loch catchment. The development of a Water Strategy for Shetland is already underway to support future growth in the area. Finalised drainage design details will be discussed during the detailed design stages of the development.

3.41 Any foul drainage will have to be gravity fed towards the Clickimin area rather than through the surrounding infrastructure at Voderview, Norstane and Staneyhill.

SURFACE WATER DRAINAGE

3.42 A surface water scheme will be required for the site which redirects all of the surface water away from the houses to the north and east and down to Clickimin.

SEPA

3.43 SEPA have been kept informed of the development and an NVC study was carried out by Shetland Amenity Trust at their request, the contents of which have been taken in to account in this report. We have also provided an overlay of the proposals showing the blanket bog areas. We await their comments.



Figure 31: Photo showing new hostel development in foreground with Anderson High School just beyond it

4. ANALYSIS OF LERWICK HOUSING DESIGN

In establishing a masterplan for the site, the design team visited a number of housing developments around the site and more broadly within Lerwick. The following pages contain a summary of the main housing developments visited, each providing a differing solution to similar climatic, topographical or edge conditions.



4. ANALYSIS OF LERWICK HOUSING DESIGN

A: Hedde's Park c 1959

B: Water Lane and Stouts Court c. 1960

C: Sandveien c 1970

D: Voderview and Norstane C Late 1970s early 1980s

E: Burnside

F: Grostane: C 1990

G: Stocketgaet c. 2000

H: Grodians c. 2010



4. ANALYSIS OF LERWICK HOUSING DESIGN



A: HEDDLE'S PARK C 1959

4.1 This scheme won a Saltire Award in 1959 and it is easy to see why. The architecture is simple and of its time but it is the quality of the open space that really makes the scheme. Care has been taken to think about the spaces between the buildings providing public space that is actually used by the residents. The simple use of good materials and the fact that it is knitted into the existing fabric of the old town makes it a good place to live. It is sheltered but allows daylight and there are no cars next to the houses.



- Saltire Award winning
- Fits well into the existing townscape
- Mixture of housing types in close proximity
- Variation in levels and massing provides interest
- Car free public space between houses
- A well-kept and respected for 60 years

4. ANALYSIS OF LERWICK HOUSING DESIGN



B: WATER LANE AND STOUTS COURT C. 1960

4.2 Built in the heart of the old town, this scheme was controversial in its day. The problem for Architects Moira and Moira was to provide a high-density housing development within the historic lanes area of Lerwick. The lanes are a conservation area concentrated around the town's Commercial Street which runs along the former seafront. It is characterised mainly by buildings which sit at right angles to the main street which runs along the contours. Running between the housing blocks are narrow lanes which step down the contours.

4.3 One might question the look of the blocks of flats and the materials, which are typical of the period, but the urban design is still quite good. It is knitted into the existing fabric, following the existing settlement pattern by building against the contours and creating lanes which join up with Commercial Street. The scale of the buildings is broken down by varying the heights and building types, mixing blocks of flats with pitched roof and flat roofed terraced housing.

4.4 The blocks themselves are of their time but building against the contour was a cheap way of accommodating tenants in relatively spacious flats. It also allowed the mass of the block to step down the hill and accommodate non-residential usage at low level (shops and offices). Car parking is remote but accessible. In between the blocks and terraced housing, they have designed small sheltered cottages along the contours with simple but effective public space in front (below).



- Well integrated into the townscape
- Interesting interpretation of the historic lanes network
- Mixture of housing types in close proximity works well
- Good use of topography
- Sheltered public spaces between buildings



4. ANALYSIS OF LERWICK HOUSING DESIGN



4. ANALYSIS OF LERWICK HOUSING DESIGN



C: SANDVEIEN C 1970

4.5 Built in the early 1970s and designed by Architects Moira and Moira, Sandveien is a low-rise development set at an extremely high density. It has always suffered from the social problems associated with similar schemes all over Scotland of that period. Although it does have its architectural merits the all-important detail and associated investment has not been followed through by the Local Authority. This is most evident in the main public space, which eventually has been laid to tarmac out of expediency rather than care for the space. The lessons of Heddle's Park have not been applied. That sends a signal that your landlord does not care about where you live and therefore does not care about you. Some tenants do embrace where they live and have made the most of what they have but most have not.



- High density low rise development
- Pedestrian friendly car free public spaces
- Little variation in massing and materials
- Confusing orientation of houses
- Materials used in public spaces poor quality despite recent improvements
- Development has a social stigma difficult to rectify
- Little or no public soft landscaping
- Feels unloved
- Was remote from the town centre at time of construction
- Now within town

4. ANALYSIS OF LERWICK HOUSING DESIGN



4.6 The public space has been thought about in the initial design and then improved in the 1990s but it is underutilised. The use of materials such as natural stone has made a big difference in places but is expensive. Rendered blockwork as a cheaper alternative looks unsightly and therefore uninviting.

4.7 The big question is how to design public space for social housing in a climate that has nine months of winter and an inside living mentality. Changing that mentality involves creating good external space of which residents can take ownership.



4. ANALYSIS OF LERWICK HOUSING DESIGN



D: VODERVIEW AND NORSTANE C LATE 1970S EARLY 1980S

4.8 The housing to the north of the site was built in the late 70s and 80s when Shetland had a housing shortage due to the oil boom. Shetland Islands Council needed to provide housing quickly and therefore the development was dictated by readily available house kits which were placed along a poorly designed road network. There has been no attention to the spaces between the buildings, nor any consideration of barrierfree access. The central road with steep parking and with no wheelchair access would not be acceptable to the local authority today. There is at least

a storey in height difference between parking and house access on sites below the road.

4.9 The area has also always felt outside the town and a bit forgotten. The north facing slope means the houses do not benefit from direct sunlight and although they have elevated views, these are over the industrial area of Lerwick.



- Little or no consideration for good quality public space
- The road layout makes the car king
- On street parking is a problem
- Detached housing that residents care for
- Residents feel remote from town and forgotten
- Little or no public soft landscaping
- Poor design consideration of levels

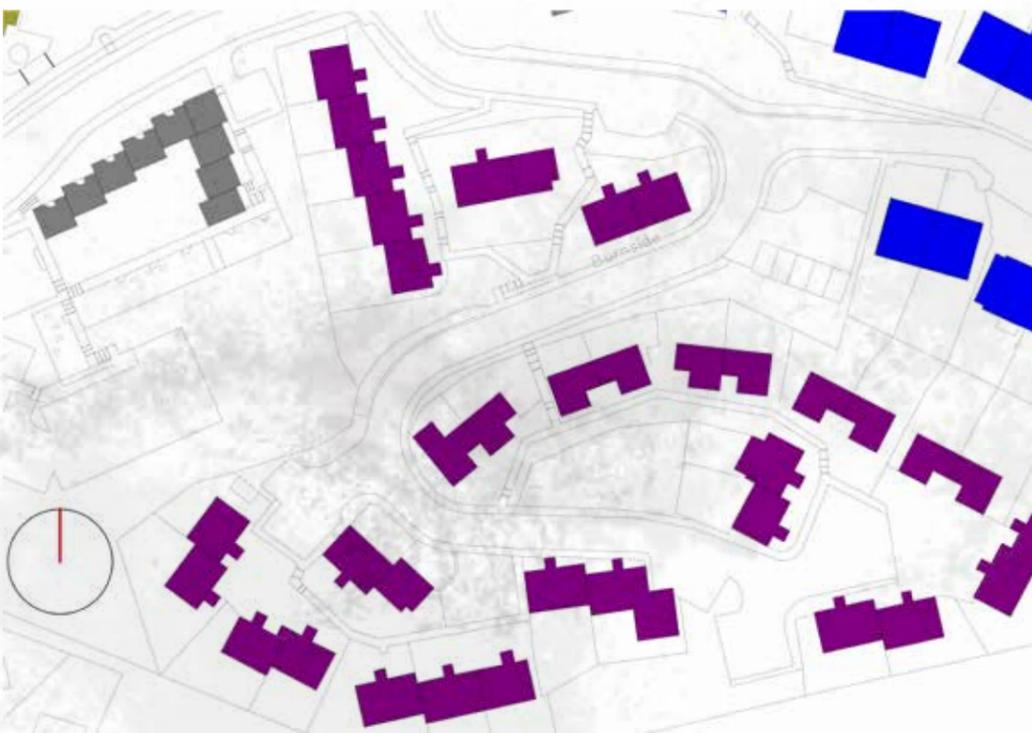


4. ANALYSIS OF LERWICK HOUSING DESIGN



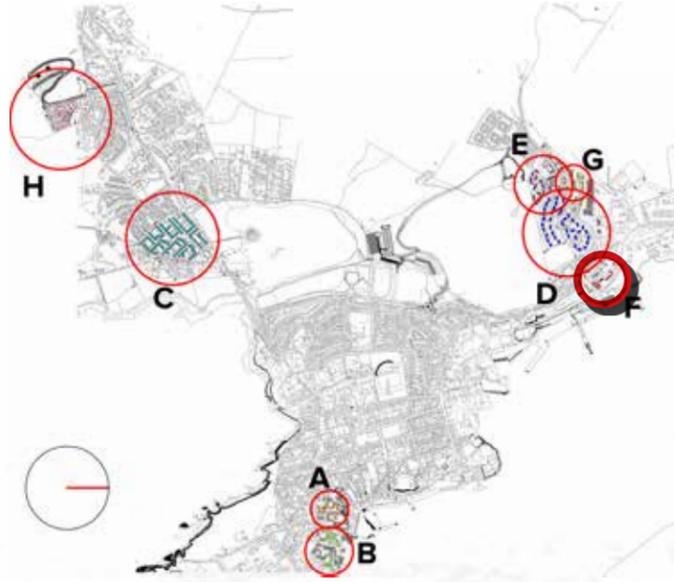
E: BURNSIDE

4.10 Burnside sits on an elevated position above Voderview. It has 'solved' the problem of the steep site by remote parking and houses accessed by steps and paths. It also uses stepped terraced housing although this is an add on to the scheme rather than defining any public space.



- Clustered housing uses levels to create shelter
- Interest from topography
- Level access is difficult but not considered important enough to find a design solution
- Dry dash render feels shabby and dull
- Little or no consideration of soft landscaping
- Feels very remote from town centre

4. ANALYSIS OF LERWICK HOUSING DESIGN



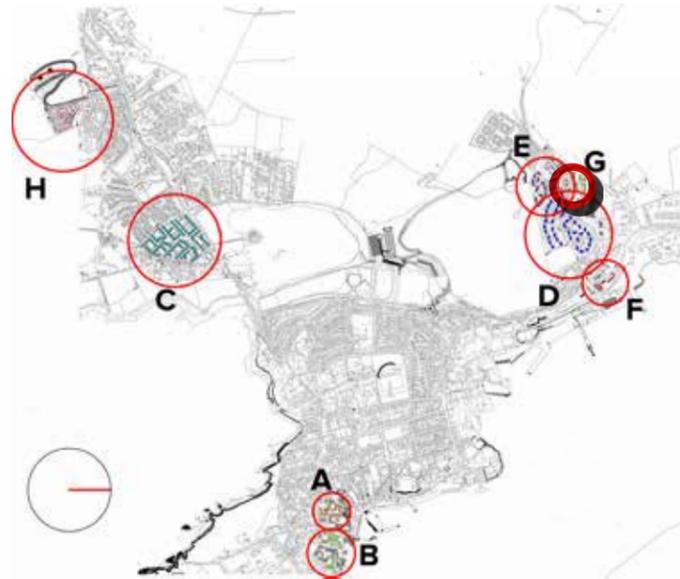
F: GROSTANE: C 1990

4.11 Designed by Richard Gibson Architects who have referenced the Lerwick lanes area to create a well-designed housing development on a steeply sloping site. It is however isolated from the surrounding housing which does not follow this settlement pattern. The houses are themselves too small and HHA find it difficult to keep them let long term



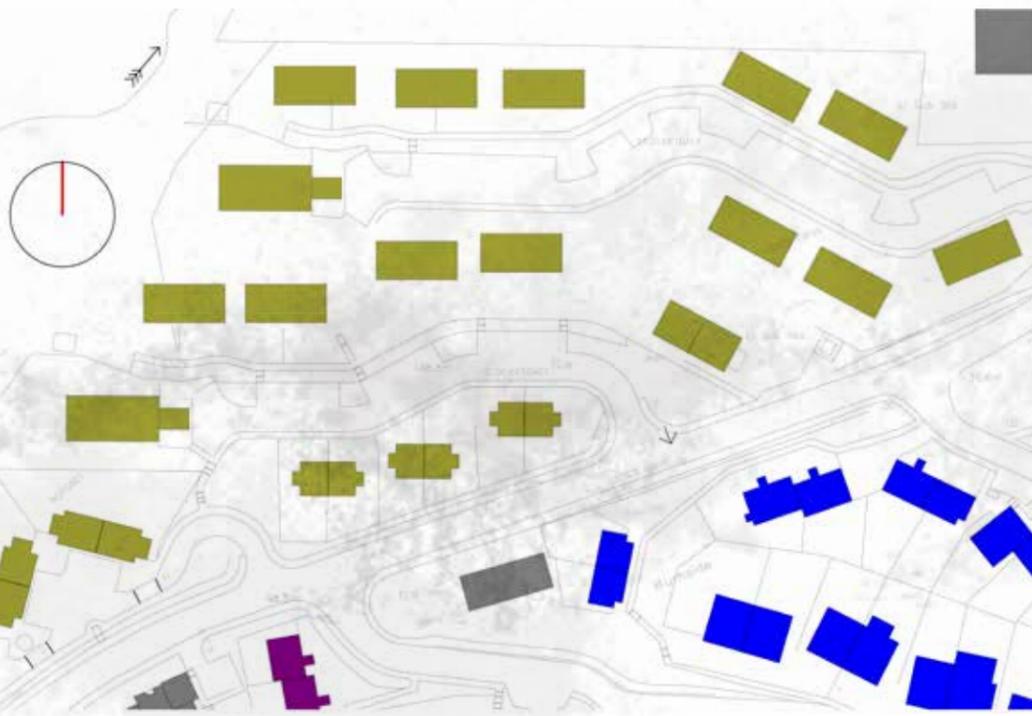
- Good Architect designed scheme
- Clever use of levels
- Makes the most of a difficult site
- Careful attention to detail
- Remote parking creates a pedestrian friendly development
- Wheelchair access difficult
- Design for flats too small
- Feels isolated from the town
- Lane does not reflect the settlement pattern of the surrounding area

4. ANALYSIS OF LERWICK HOUSING DESIGN



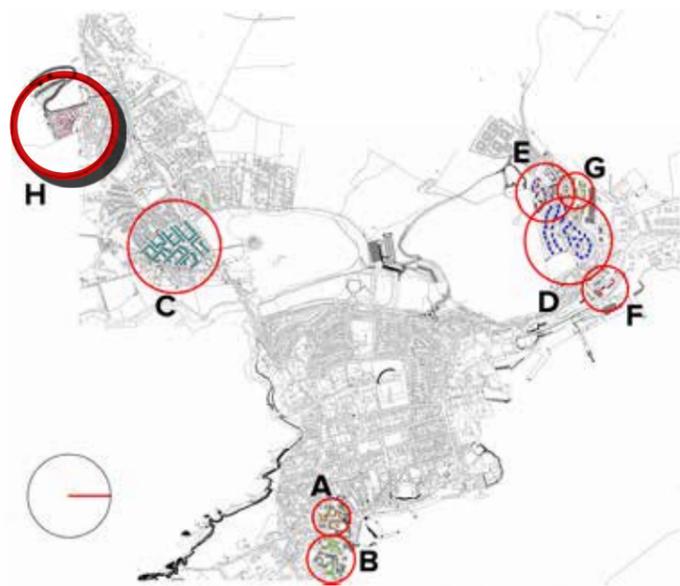
G: STOCKETGAET C. 2000

4.12 Well detailed timber clad housing with modern internal layouts and manageable gardens which cascade down the steeply sloping site. A more careful approach to the choice of landscaping materials makes for a more pleasant environment if a little exposed. The scheme still feels a little disjointed and there is very little in the way of usable public space to create a sense of community. The space that has been provided is generally open and exposed.



- Well designed and detailed individual units
- Use of colour and materials feels fresh
- Better use of landscaping than most schemes
- Housing blocks seem too far apart to create sheltered spaces
- Little feeling of urbanity
- Poor public space and little sense of community
- Open and exposed with little useable public space which needing shelter

4. ANALYSIS OF LERWICK HOUSING DESIGN



H: GRODIANS C. 2010

4.13 Forming part of the Quoys development on the southern outskirts of Lerwick, Grodians represents the pinnacle of the housing developments reviewed here. A multi award winning scheme by Richard Gibson Architects creates well designed detached housing within public spaces and roads that promote that sense of community demonstrated almost 50 years earlier.

4.14 The site is a small scale development on a fairly flat site with a relatively typical suburban layout, but with clever design of the roads and parking creates a strong sense of place without providing a 'useless' amenity space. Good use of colour and texture creates a vibrant feel to the development.

4.15 The site does not address or integrate well with the existing road infrastructure or surrounding housing but does address the rural edge well with a more open post and wire boundary treatment



- Saltire Award winning
- Suburban layout but well-designed road layout puts pedestrians first
- Good consideration of landscaping
- Excellent use of bold colour
- Scandinavian feeling
- Good use of topography
- Works well on its own but does not integrate with surrounding housing
- Addresses the rural edge well with open boundary

5. CONSTRAINTS AND OPPORTUNITIES - SITE PARAMETERS AND FEATURES

This section summarises the key parameters set out in the project brief by the SIC and Hjalmland. It highlights the key site features identified during the design team's assessment of the site and surrounding area. These provide the foundation for the site's design.

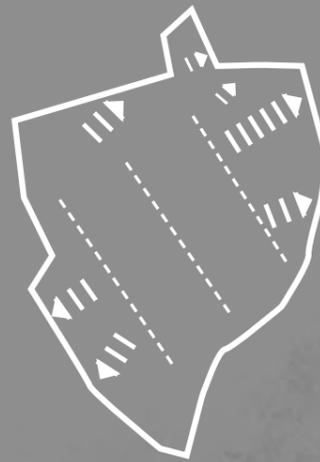
PROJECT BRIEF: KEY PARAMETERS

- Identify land for the development of 300 new mixed tenure homes.
- Set out adoptable road network for site
- Identify land for open space and community use.
- Identify site for office development
- Views of the skyline from Clickimin Broch were to be protected.

SITE REVIEW: KEY FEATURE



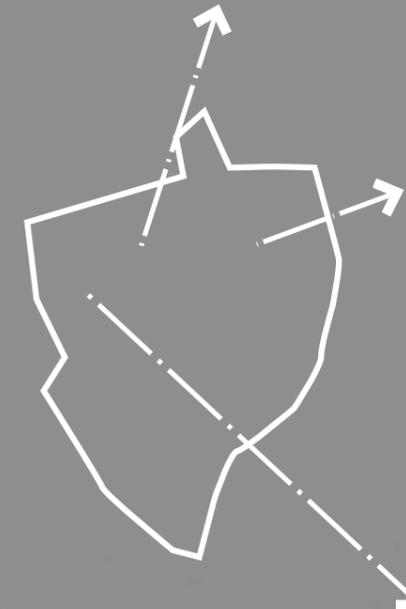
Housing areas bound the north western, northern and eastern edges of site with education and recreation uses along its south eastern edge.



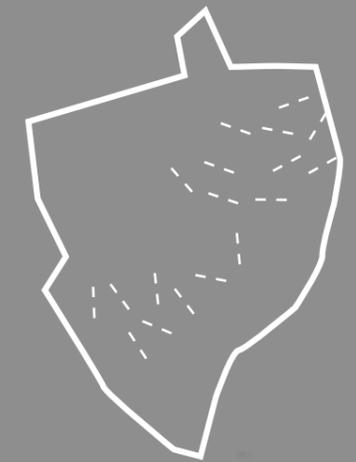
Shallow valleys cutting south east across the site slopes steeply at its eastern end, at the end of the ridgeline cutting into the site from the west.



Number of access points into the site, to residential areas in the north and new high school access road in the south, neighbouring bus routes.



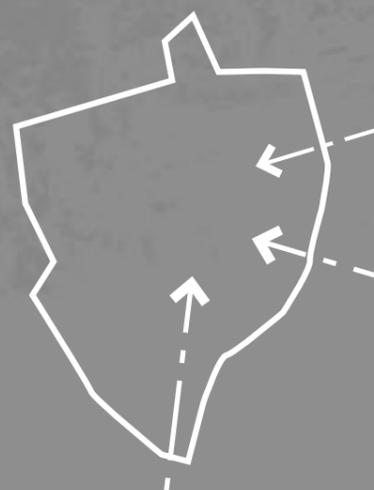
Excellent views to north, east and south connect site to Lerwick and wider landscape, enhancing and enriching experience of site



Rocky outcrops are evident across the site



The site comprises a corridor of blanket bog across its centre and northern section and grassland / acid grassland along the southern and south eastern edges of the site



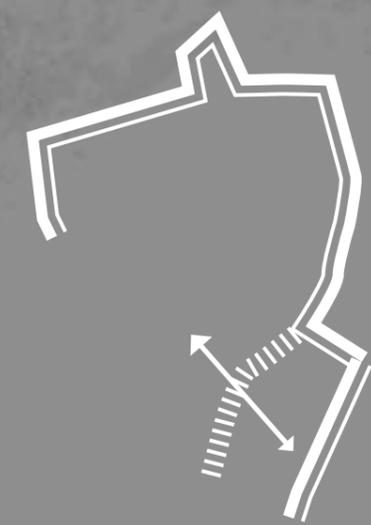
Sensitive historic view of site from south overlooking Broch, additional views of town-wide importance from ferry terminal and town centre



North easterly and south westerly wind direction of most concern to protecting public realm



Domestic landscape edges along northern and eastern edge, clump of tree planting (community woodland) situated at eastern edge of site



Housing backs onto the majority of the site edge, mixed use sports and education land uses are situated at its southern edge

5. CONSTRAINTS AND OPPORTUNITIES - SITE PARAMETERS AND FEATURES

ANALYSIS OF LERWICK HOUSING DESIGN

A: HEDDLES PARK

- Saltire Award winning
- Fits well into the existing townscape
- Mixture of housing types in close proximity
- Variation in levels and massing provides interest
- Car free public space between houses
- Well-kept and respected for 60 years

B: WATER LANE AND STOUTS COURT

- Well integrated into the townscape
- Interesting interpretation of the historic lanes network
- Mixture of housing types in close proximity works well
- Good use of topography
- Sheltered public spaces between buildings

C: SANDVEIEN

- High density low rise development
- Pedestrian friendly car free public spaces
- Little variation in massing and materials
- Confusing orientation of houses
- Materials used in public spaces poor quality despite recent improvements
- Development has a social stigma difficult to rectify
- Little or no public soft landscaping
- Feels unloved
- Was remote from the town centre at time of construction
- Now within town

D: VODERVIEW AND NORSTANE

- Little or no consideration for good quality public space
- The road layout makes the car king
- On street parking is a problem
- Detached housing that residents care for
- Residents feel remote from town and forgotten
- Little or no public soft landscaping
- Poor design consideration of levels

E: BURNSIDE

- Clustered housing uses levels to create shelter
- Interest from topography
- Level access is difficult but not considered important enough to find a design solution
- Dry dash render feels shabby and dull
- Little or no consideration of soft landscaping
- Feels very remote from town centre

F: GROSTANE

- Good Architect designed scheme
- Clever use of levels
- Makes the most of a difficult site
- Careful attention to detail
- Remote parking creates a pedestrian friendly development
- Wheelchair access difficult
- Design for flats too small
- Feels isolated from the town
- Lane does not reflect the settlement pattern of the surrounding area

G: STOCKETGATE

- Well designed and detailed individual units
- Use of colour and materials feels fresh
- Better use of landscaping than most schemes
- Housing blocks seem too far apart to create sheltered spaces
- Little feeling of urbanity
- Poor public space and little sense of community

H: GRODIANS

- Saltire Award winning
- Well-designed road layout puts pedestrians first
- Good consideration of landscaping
- Excellent use of bold colour
- Scandinavian feeling
- Good use of topography
- Works well on its own but does not integrate with surrounding housing

PROJECT BRIEF: KEY PARAMETERS

- Fit into existing landscape / townscape including the local topography etc
- Design to include appropriate mix of housing types in close proximity
- Mix of parking forms including in-curtilage, on-street, undercroft and in-structure
- Inclusion of pedestrian friendly car free spaces between houses
- Design in good long-term maintenance
- Inclusion of sheltered public open spaces within and between housing areas
- Inclusion of appropriate local historic urban forms such as closes, wynds and sheltered walkways between buildings
- Use of buildings to enhance spaces and environment e.g clustered housing
- Well connected to surrounding housing and Lerwick Town Centre
- Use of appropriate good quality local materials that will weather well such as locally excavated natural stone
- Well designed and detailed buildings and spaces with careful attention to detail and materials including use of colour
- Inclusion of strong landscape structures and forms to add shelter and interest
- Inclusion of strong community focus and facilities
- Strong and appropriate boundary treatments including open edges to moorland / rural edge
- Need for shelter

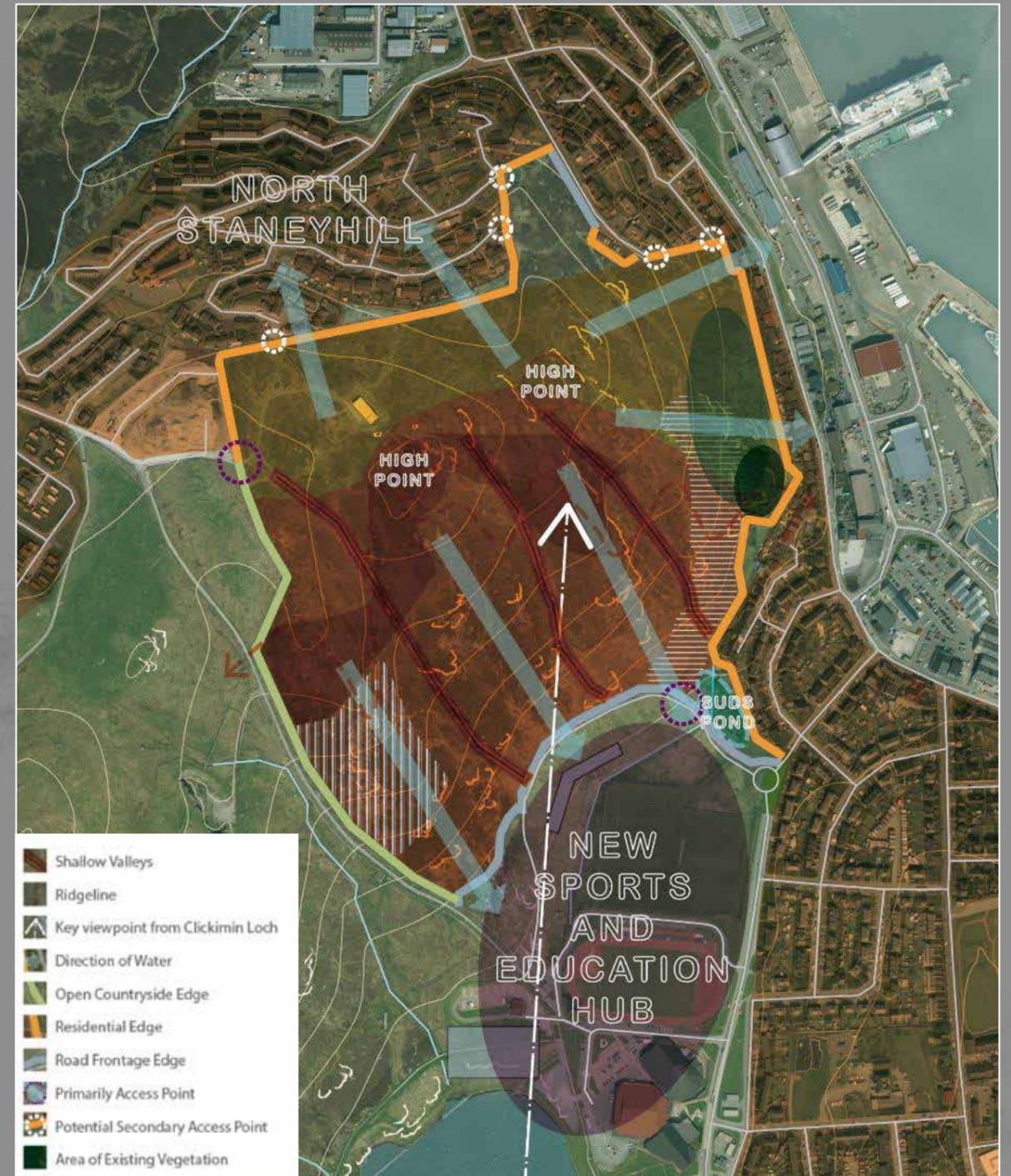


Figure 31: Photo showing some of the key conditions of the site

6. DESIGN JOURNEY

This chapter explains how the design journey allowed for the emergence, selection and refinement of a preferred option that satisfied the design parameter.

The chapter identifies the key stages in the development of the design. It begins by outlining the initial scoping of the site that was undertaken before the submission of the application for Planning Permission in Principle. It then refers to the relevant national and local guidance and outlines the use of the Place Standard tool. There follows a concise description of the public engagement that took place and the requirements of stakeholders, explaining how these influenced the design, with a more comprehensive explanation included in accompanying documents.



6. DESIGN JOURNEY

First Steps

- 6.1 The design team began work by really getting to know the site (see aerial images opposite). This cannot happen with one site visit and we would urge all design teams for the detailed design phases to do the same thing. It needs to be experienced at different times of the year and in all weathers to appreciate the particular challenges the site poses. We found that visiting the site on a regular basis was the best way to allow us to design for this location with most creative solutions actually worked out on site.
- 6.2 The topography and lay of the land dictate that the only way of seeing the site as a whole was from the air. We commissioned drone footage which was invaluable for both ourselves and the local community in understanding the problem at hand. It was clear that this site would not offer an easy solution. This footage combined with tramping across the hillside in all weathers gave us the best possible understanding on which to base our proposals.



Figure 32: 3 hha site site boundary and contours



Figure 33: 2 hha site site boundary and contours

6. DESIGN JOURNEY

Site information

- 6.3 The design team were able to assemble existing information about the site on which the Masterplan is based. We have assumed that this existing information is correct. Detailed site information however should be sought for each of the phases of the development.
- 6.4 Firstly, we have used the topographical survey which was carried out by Shetland Islands Council a number of years ago (image opposite) when they were the land owners. This information generates the contours shown on the Masterplan. We have used another Shetland Islands Council topographical survey for the contextual information to the west of the proposed site. Thereafter Ordnance Survey information has been used to generate the 3 D context model for the rest of Lerwick.
- 6.5 Secondly, we were given a hard copy drawing of the legal boundary for the site by Hjaltland Housing Association (image below) which was agreed when they purchased the land from Shetland Leasing and Property Developments Ltd (SLAP). We were not able to obtain coordinates for the boundary points. The exact site boundary should be confirmed before the detailed design is progressed. HHA have also asked us to investigate developing the area to the south of their boundary and the new school road.
- 6.6 Shetland Biological Records Centre was commissioned by the design team to undertake a survey of the area to map all habitats to a Phase 1 level, identify any potential Ground Water Dependent Terrestrial Ecosystems (GWDTEs) and classify them using the National Vegetation Classification (NVC), and comment on the conservation importance of these GWDTEs.
- 6.7 HHA have commissioned an Archaeological study of the area and this information should be considered when considering the detailed design of each phase.
- 6.8 Malcolmson Architects (previously trading as Redman Sutherland Architects) had carried out two previous studies for Hjaltland Housing Association before they bought the land from SLAP: The initial feasibility study of February 2004 investigated any constraints on the site and the capacity study of March 2015 examined the housing numbers that were possible due to the constraints. The information learned by carrying out these studies has been carried forward to the development of the masterplan.

The Constraints

- 6.9 Ideally HHA like to occupy as much of the site as possible; however it was evident from an early stage that this was not realistic. Development in some areas was neither technically possible nor economically viable. For the HHA, who are both self and publicly funded, these add up to the same thing.

Historic Environment Scotland: A major constraint identified at the outset was that Historic Environment Scotland wants to protect the view from South Road of Clickimin Broch, and the backdrop to it, which is formed by Staney Hill. This has been a longstanding desire and was reflected in the Shetland local development plan. In recent years however, and approved by HES, this backdrop has been compromised somewhat with the building of the New Anderson High School and Hostel close to the Clickimin Leisure Centre.

'any development should not break the skyline of the Staneyhill when viewed from the broch.'

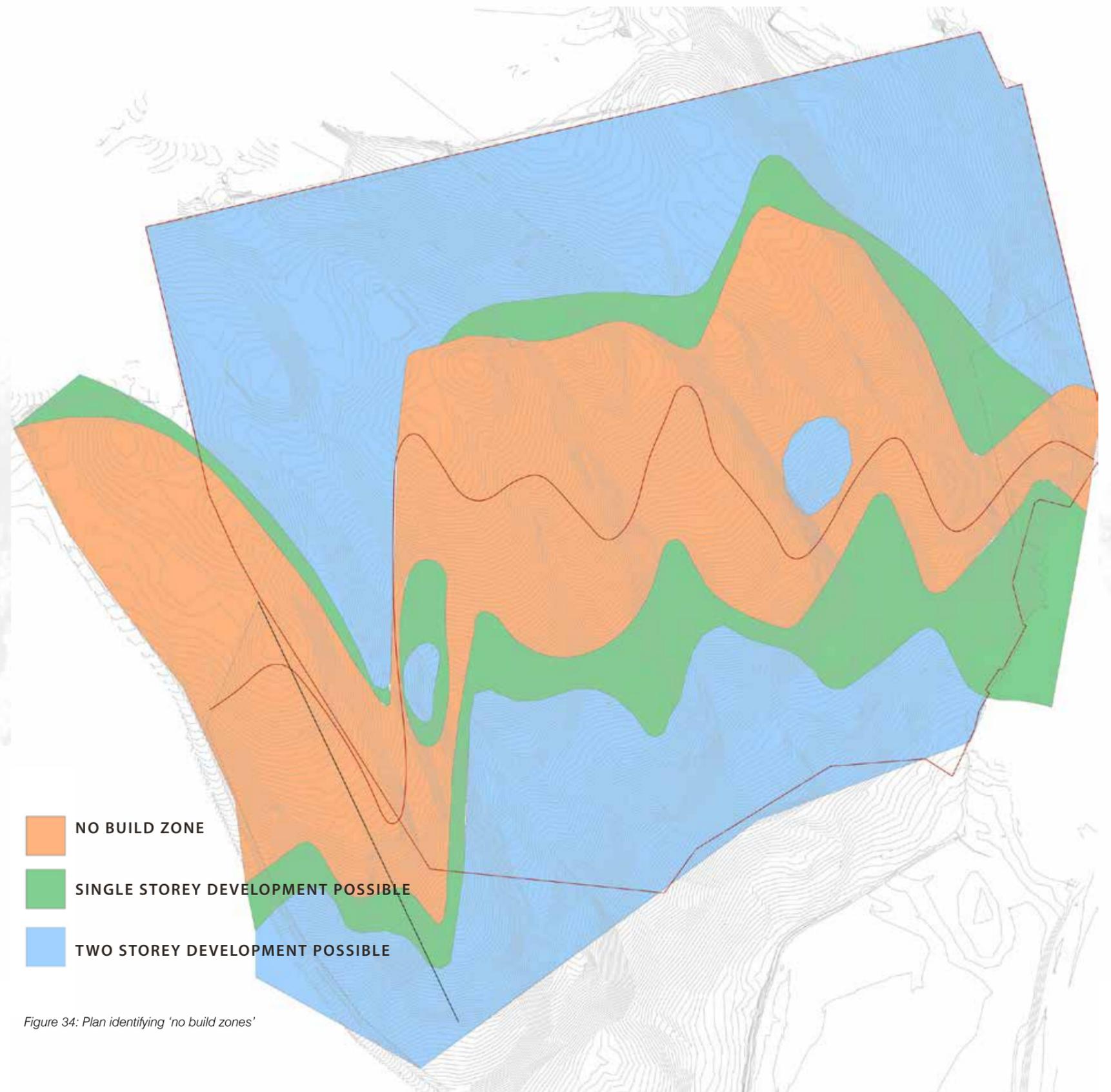


Figure 34: Plan identifying 'no build zones'

6. DESIGN JOURNEY



Figure 35: Exploratory sections assessing potential build / no build zones in respect of views / Skyline from historic Broch

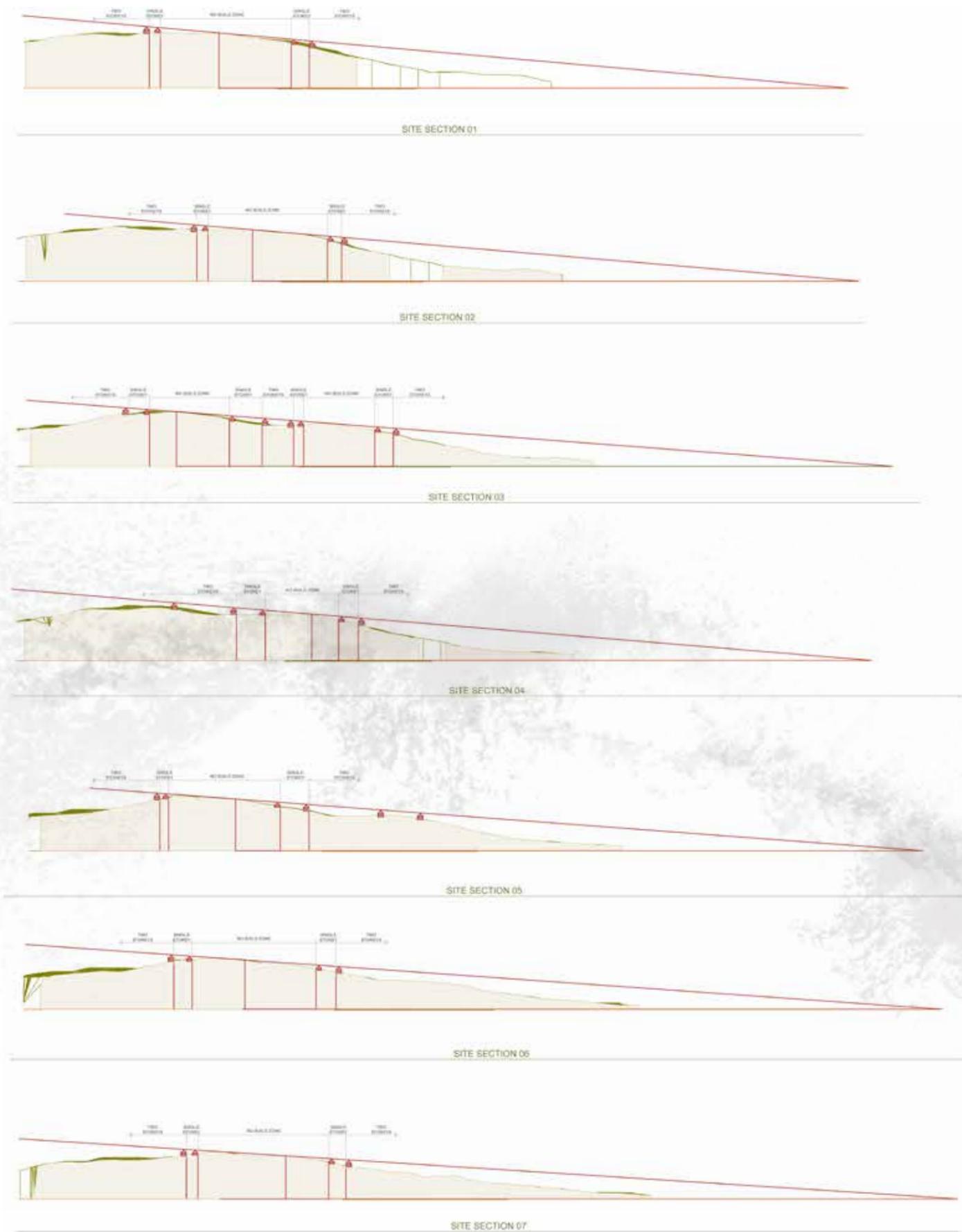


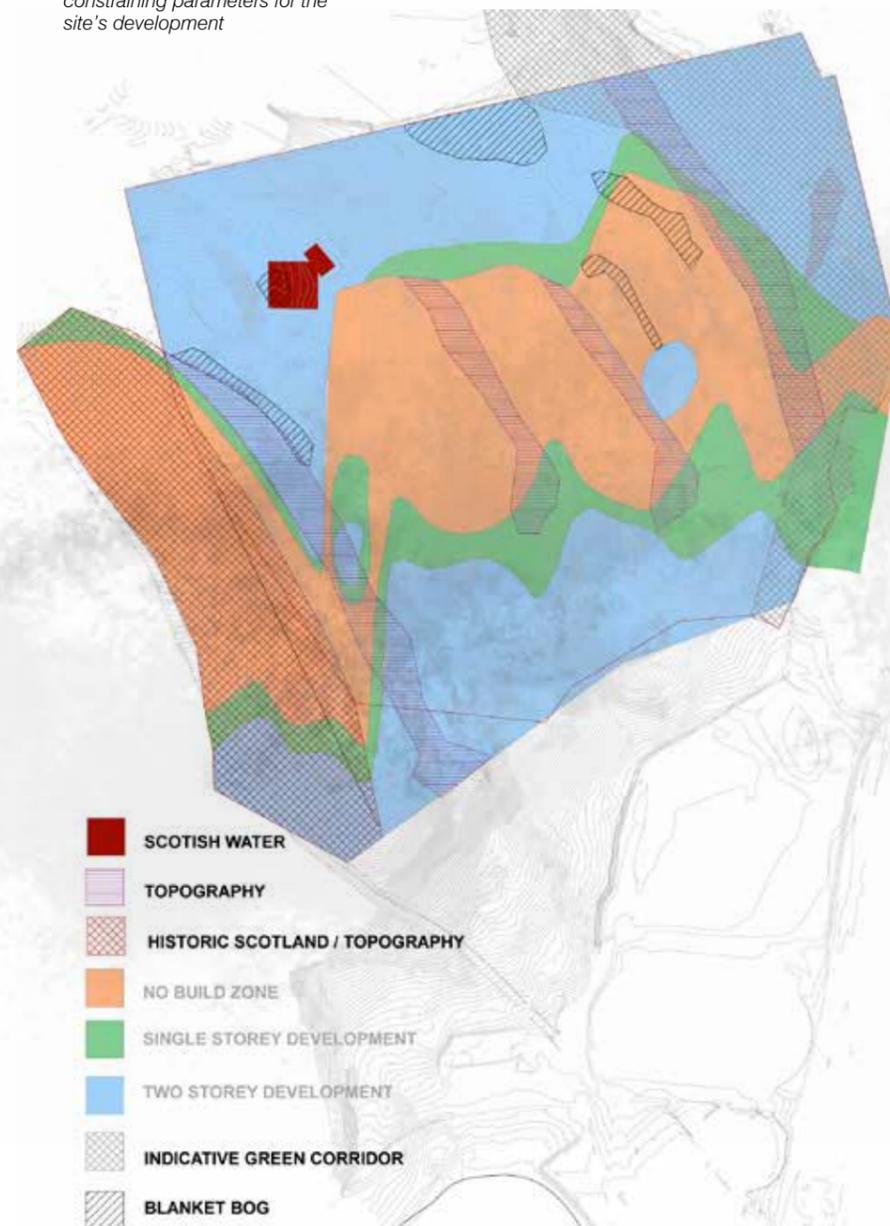
Figure 36: Plan with site sections

6. DESIGN JOURNEY

6.10 There is therefore a slight change to the HES viewpoint in so far as development behind the new school will be considered on its merits. However, any future development should not break the skyline when viewed from the Broch. Also, they would not support any development directly behind the Old Staneyhill Road which would sit above and to the left of the school when viewed from the Broch.

6.11 To understand where development would be possible that cannot be seen from the Broch we created a 3D computer model through which we were able to cut sections and superimpose the line of site from the Broch (see diagrams on page 45). This set the visible ridgeline on plan. Thereafter it was possible to plot on section where it was possible to build standard housing types and we could identify the areas where it was not possible to build and areas where single and two-storey development was possible to proceed with caution.

Figure 37: Plan showing range of constraining parameters for the site's development



6.12 This approach, however, does not define the plot boundaries, which will depend on the final, detailed design. The overall constraint remains: **any development should not break the skyline when viewed from Clickimin Broch.**

6.13 In addition to the HES Broch views / skyline constraint, the initial site and desk study identified further physical constraints including:

- Topography where the ground is much too steep for any development.
- Areas of blanket bog which should be considered with caution.
- The Green Corridor identified by SIC as requiring development with caution.

6.14 We also identified the existing Scottish Water infrastructure on the site. In our

Figure 38: Plan identifying areas best suited for development

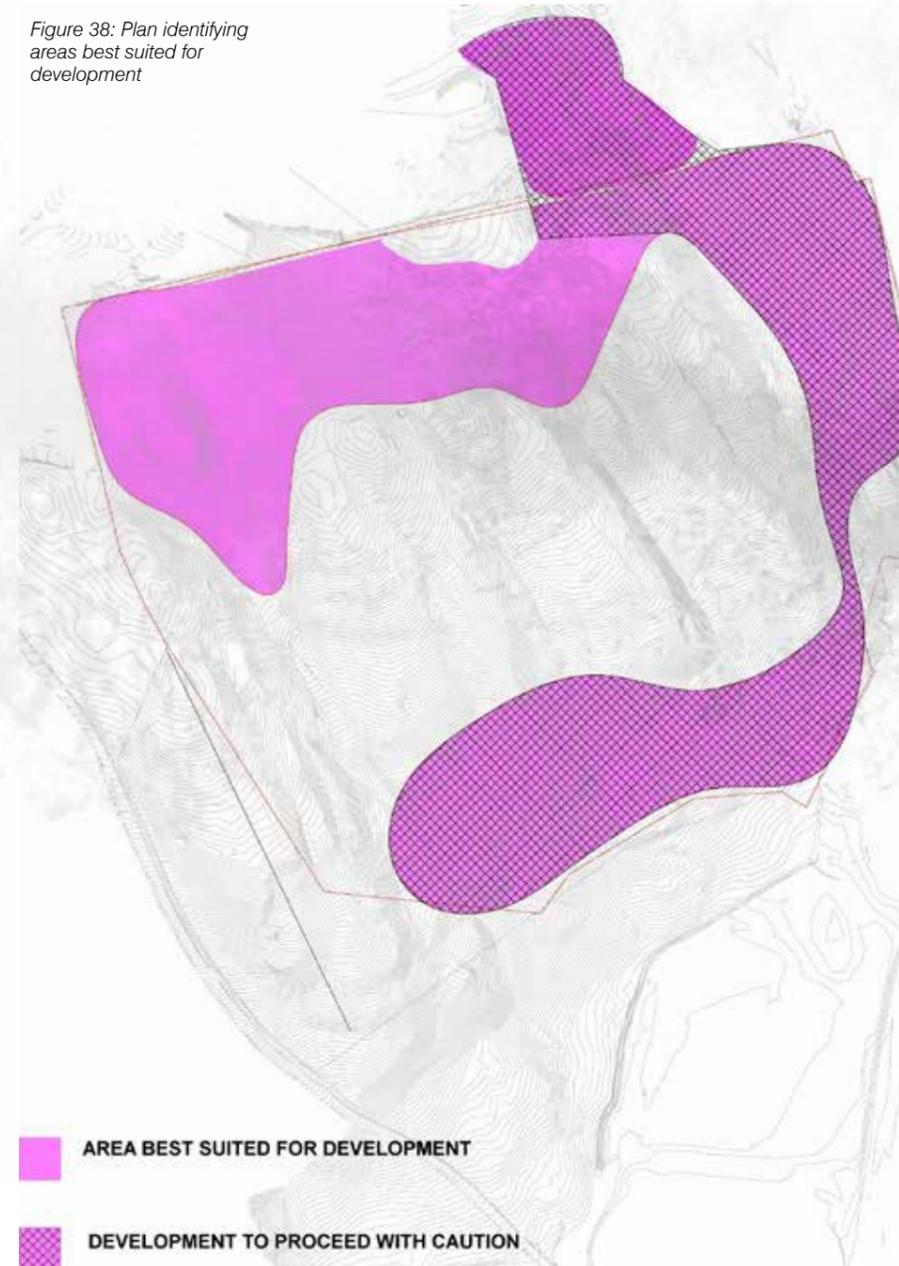
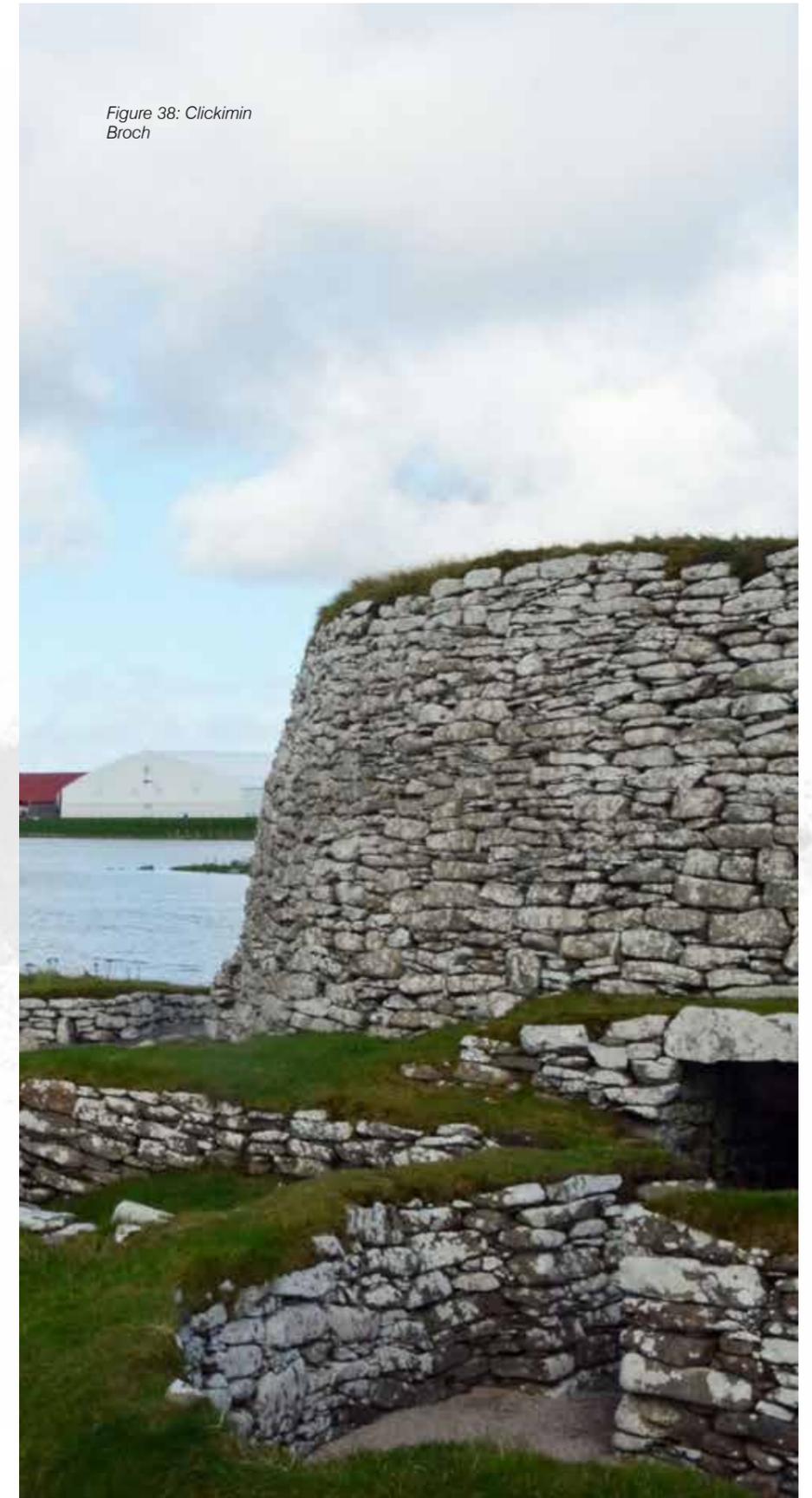


Figure 38: Clickimin Broch



6. DESIGN JOURNEY

discussions with Scottish Water we have ascertained and agreed a strategy for the removal of their existing infrastructure on the site and the development of a new watermain which will mainly pass through the areas which are not developable.

- 6.15 By mapping all these constraints on one plan, we have been able to identify areas where development was and was not recommended.

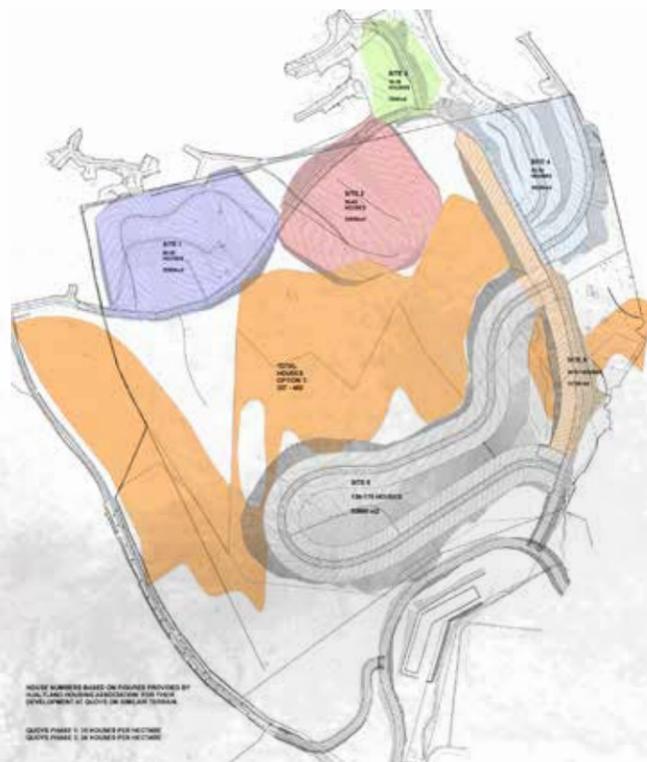


Figure 39: Option 1

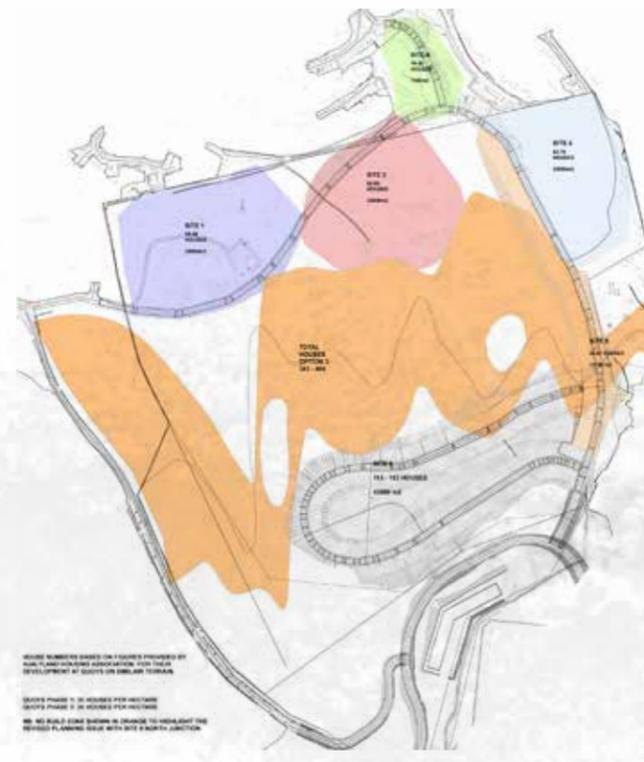


Figure 40: Option 2

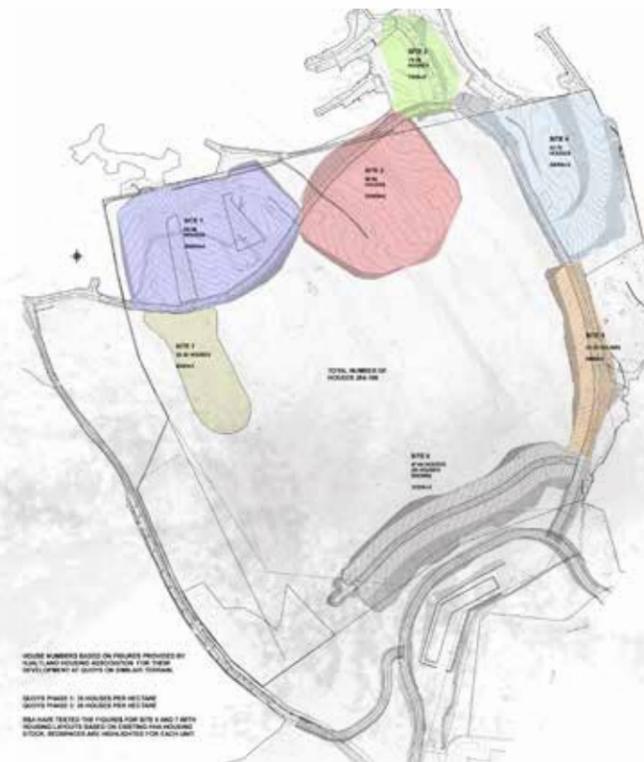


Figure 41: Option 3

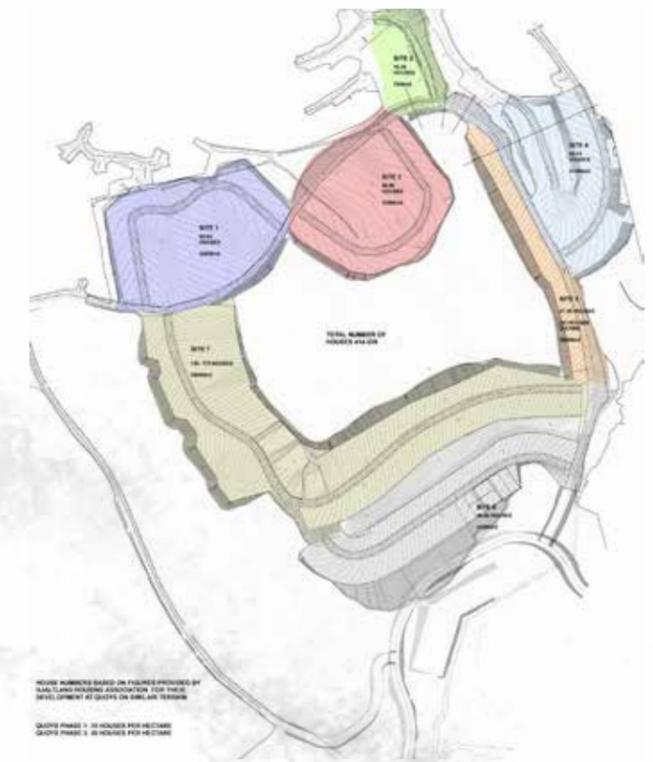


Figure 41: Option 4

Design development: Investigating the road

- 6.16 We would like to make it clear that we did not want to make a masterplan which was dictated by the road engineering. We firmly believed that the new direction identified in the *Designing Streets* should be adopted and enhanced to ensure that any development puts the pedestrian and therefore the people who live in the development first.

- 6.17 We do have a constraint imposed by the developer (HHA) that all roads and drainage should be adoptable by SIC and Scottish Water. Therefore, we do have to keep to adoptable roads standards in terms of gradient and alignment.

- 6.18 Malcolmson Architects (RSA) and Mott MacDonald investigated various road layouts which would try

to maximise the developable area of the site and the connectivity between the north and the south. It was also important to bear in mind the cost of developing the road infrastructure which would be affected by the amount of rock excavation and offsite disposal. It was agreed that offsite disposal should be kept to a minimum to keep costs down and provide a more sustainable approach to the development of the site.

- 6.19 **Option 1:** On first inspection on our walk around the site appeared possible to connect the north and south of the site through the most westerly of the 3 'valleys' which characterises the southern slopes of the site. This road would tie in with a main spine road which would connect the north end of the site at Wista to the southern end at the new access road to the school. The alignment of this new spine road would roughly follow the north and eastern boundaries and would be concentrated through

a pinch point at the back of the Burgess Street houses which would have to be common to all the road layouts due to topographical constraints.

- 6.20 On investigation, however, whilst it was just possible to design the spine road, it was not possible to design an economical solution for the road running north south due to the required road gradients. (See Option 01 layout opposite)

- 6.21 **Option 2:** Option 2 abandoned the idea for a north south vehicular access road. A pedestrian connection route would be investigated further for this location. The northern spine road is retained and we investigated a loop road on the southern slopes which connects back to the spine road.

- 6.22 Our conclusions were however, that the colossal amount of rock which would have to be removed from the site made this option not only economically unviable but also unsightly. (See Option 02 layout opposite)

- 6.23 **Option 3:** Option 3 tried to vary the southern loop road to reduce the amount of rock which had to be removed from site. This and various minor alterations to the alignment actually increased the amount of rock excavation. (See Option 03 layout opposite)

- 6.24 **Option 4:** Option 4 investigated a single access road with a turning head. This much reduced the rock excavation to a level where it was economically viable to construct the road. This would form the basis of the way forward.

- 6.25 Along the road alignment we identified 7 areas where houses could possibly be placed. Some of these sites

6. DESIGN JOURNEY

were more challenging than others and would need further investigation. (See Option 04 layout opposite)

Design development: Public consultation 1

6.26 The first public consultation was held to try to ascertain the feelings and aspirations of the residents who would be directly affected by the development. A full report on the findings of all the public consultations can be found in an Appendix to the masterplan. Using the newly created Place Standard Tool, in public meetings and targeted meetings such as at the Anderson High School, we were able to find out what people of all ages thought about the site and its surroundings. We were then able to incorporate these findings into the design brief which has had a positive effect on the final proposals. We felt this approach was really important and fundamental to a successful outcome. After all this development will have a major effect on both the existing local residents and the new people who will move into the area. Actually listening to the people who matter gives the best chance of creating a new integrated community.

6.27 The first phase of community consultation on the development of the Staney Hill site was undertaken during May and June 2016. Several ways of eliciting public views were employed. These included:

- meetings with the Lerwick Community Council and the Staney Hill Community Association
- press and radio coverage, including a BBC Radio Shetland interview, based on a press release
- advertising in the Shetland Times and on SIBC
- exhibitions at the Toll Clock Shopping Centre and the Clickimin Centre
- the production of leaflets, incorporating a questionnaire
- the creation of online material, including a Facebook page, together with an online version of the consultation questionnaire
- the production of a video, using a drone, that offered an aerial tour of the site
- a public drop-in session at which local residents were able to view displays, discuss the project with the team, complete questionnaires and make

comments using post-it notes

- a public workshop in which the Place Standard Tool was used to assess the area surrounding the site
- a school workshop involving geography students in Secondary 4 at the Anderson High School.

6.28 The comments received, and the discussions held, were very valuable in helping the design team to understand the community's aspirations for the new development. Residents also provided very helpful insights into existing issues that they felt needed to be addressed, for example the water runoff from Staney Hill that affects some existing properties.

Residents wanted the new development to:

- Be safe, especially for children
- Be focused on housing, including (for a majority) some serviced sites for private housing, with support for park and recreational provision (including a possible replacement for the Clickimin caravan and camping site) but opposition to office and workshop uses.
- Have good and safe traffic management that doesn't exacerbate any existing problems
- Offer good opportunities for movement on foot and by bike including north - south links
- Include substantial provision for access to open space and for play and recreation
- Conserve and enhance the natural environment, with a particular focus on existing and new tree planting and on wildlife
- Respect the area's heritage and traditions, including WW2 remains and such community activities as bonfires and sledging
- Be well designed, with buildings that are suited to Shetland and to the site, both aesthetically and in terms of their weather resistance
- Avoid, during construction, unacceptable impacts on neighbouring occupiers.



6. DESIGN JOURNEY



Figure 42: Results from one of the tables completing the Place Standard during the first community event

6. DESIGN JOURNEY

Design development: the housing areas

THE POSITION OF THE ROAD

6.29 The initial design development concentrated on the housing areas along the road. Having tested the road alignment around the edge of, and through the middle of the developable area the optimum decision was for the road to go through the centre of the housing areas. This approach endeavoured to balance cut and fill, retain existing site characteristics (views, landform and vegetation), whilst forming the basis of community centric development zones. The layout of the road and development areas should ensure that each housing area should have its own character around the road rather like a series of beads on a necklace. The road will be limited to 20mph and housing should be grouped along it relatively tightly to give an urban rather than a suburban feel. It would therefore be easier to develop the character of these areas.

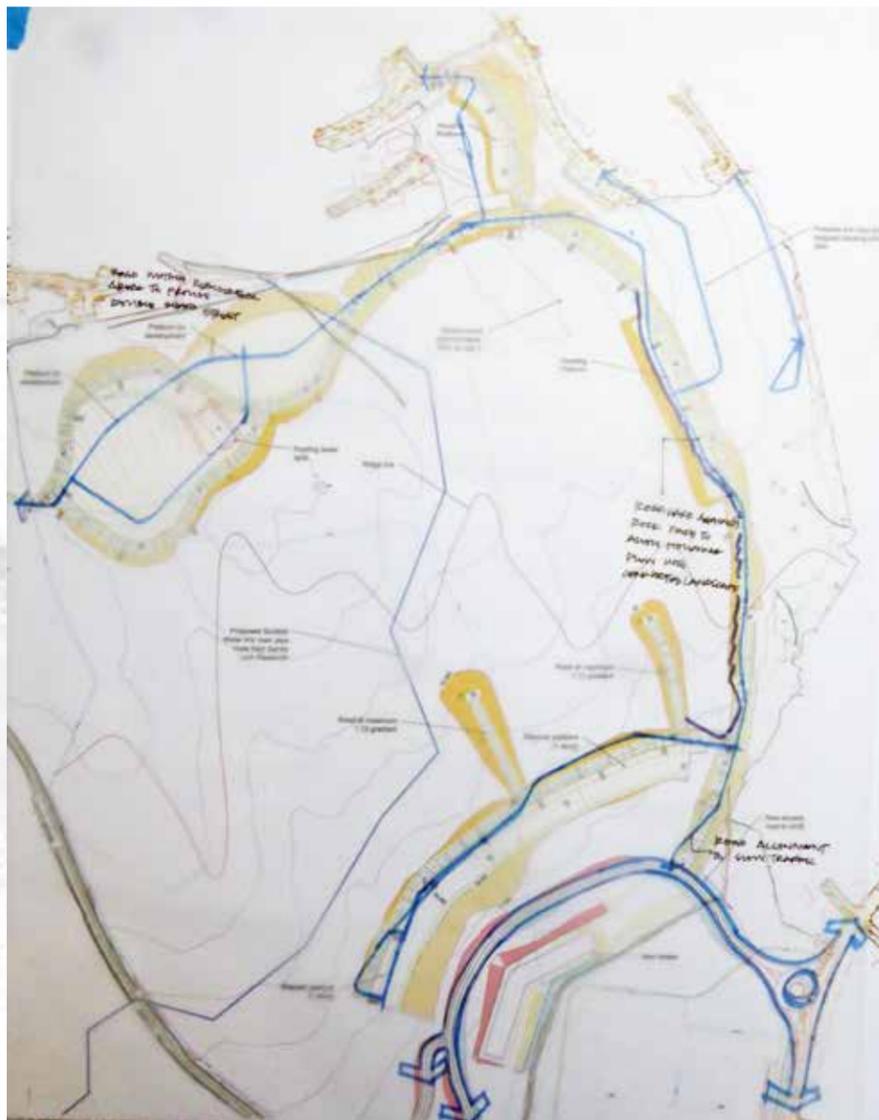


Figure 43: Road alignment as key driver for development area layout



Figure 44: Exploration of identified build zones / developable areas

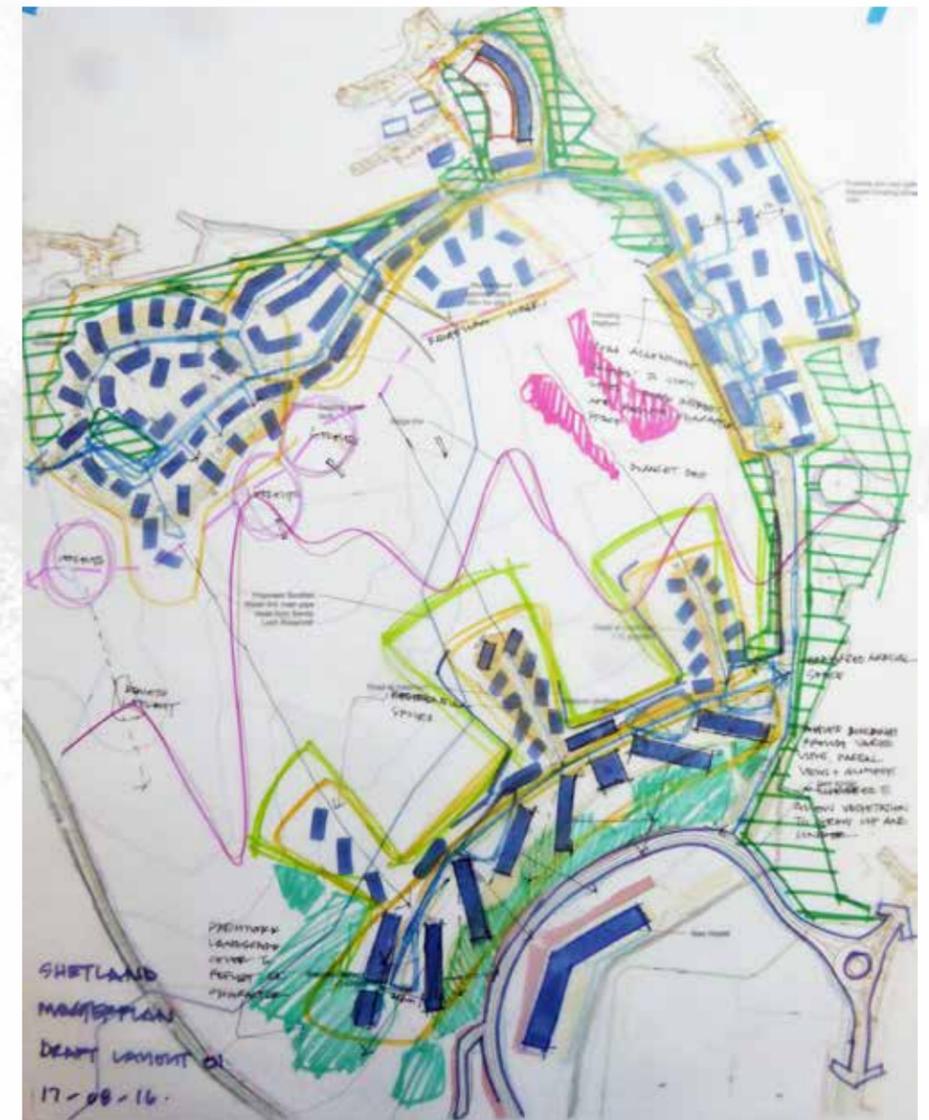


Figure 45: Exploration of form and layout of identified build zones, and establishment of development areas individual and collective, character and identities

6. DESIGN JOURNEY

CONCEPT DEVELOPMENT

6.30 The concept for the masterplan as a whole was developed. This included the completing of the hard-urban edge around the Clickimin pitches and the development of the urban wall on the southern slopes behind the new hostel, building into the 'valleys'; the housing areas to the north and the green corridor.

LANDFORM AND VALLEYS

6.31 More thought began to be given to the housing areas, looking more closely at the topography to define where they should be concentrated and how the housing would sit on / into the existing levels and landform. Further investigation of the valley areas found that a vehicular road would not be possible. HHA were very keen to investigate car free housing in these areas.

VIEWS

6.32 Views from and to the site were a key stricture in the design development process to ensure that views to primary assets such as the town centre, the harbour and Bressay beyond were woven in to the layout of the road alignment and housing.

ASPECT

6.33 Aspect, microclimate and shelter were central to design decisions.

Figure 46: NSHMP Sketch site layout Aug 2016

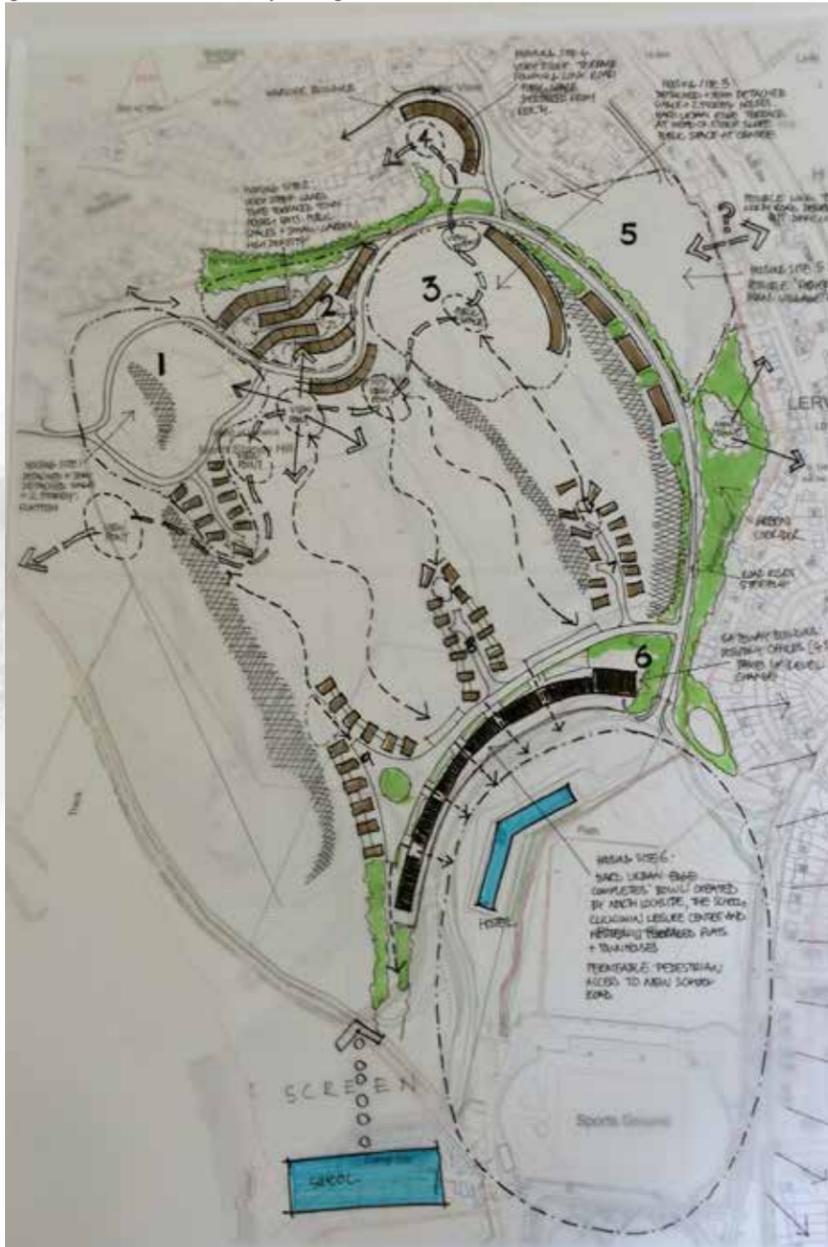
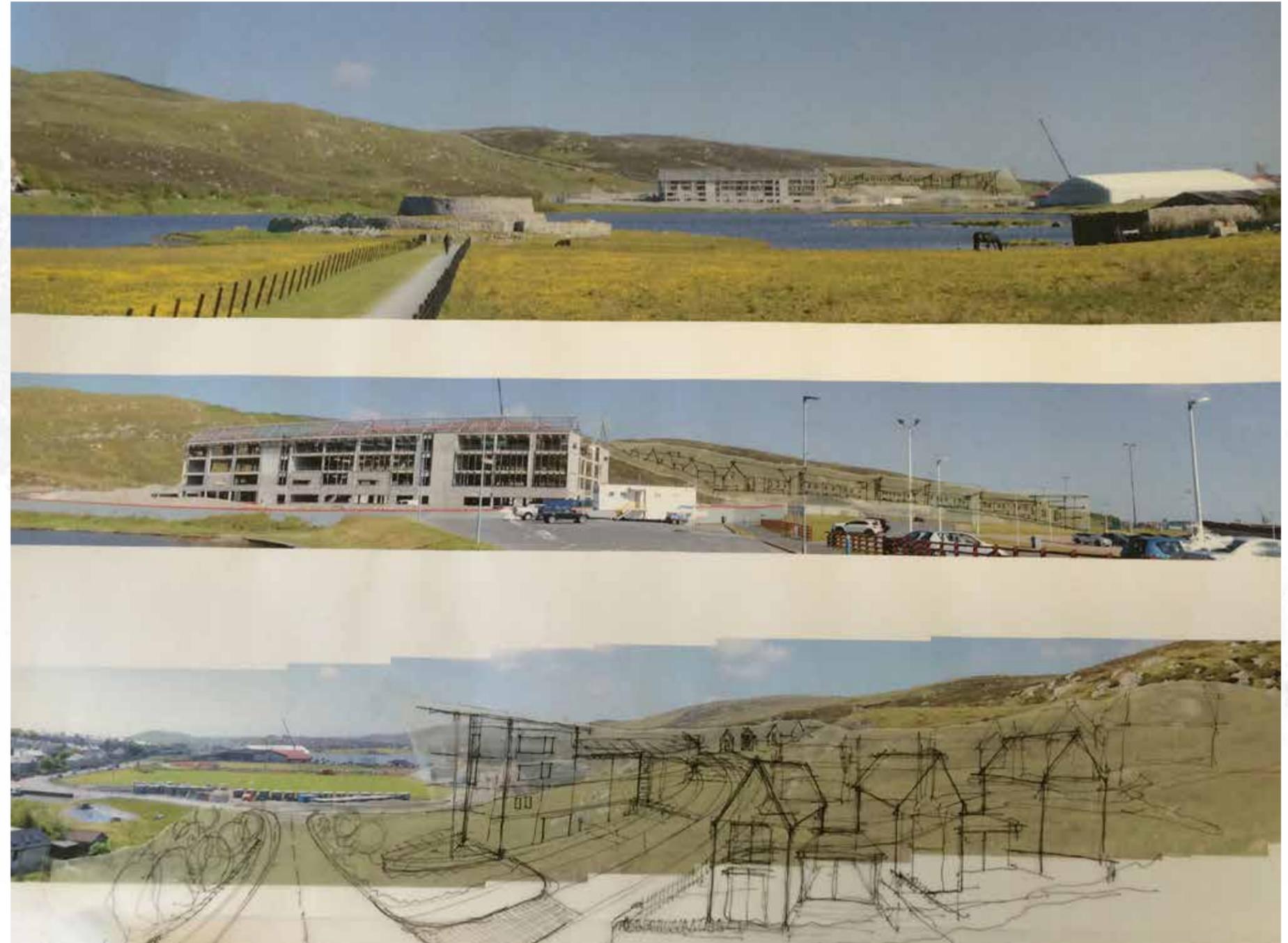


Figure 47: NSHMP View from Broch, behind school and new spine road connection showing urban edge



6. DESIGN JOURNEY

CONCEPT DEVELOPMENT

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Figure 48:
Range of housing
and landscape
arrangements for the
site



LANDFORM AND VALLEYS

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6. DESIGN JOURNEY

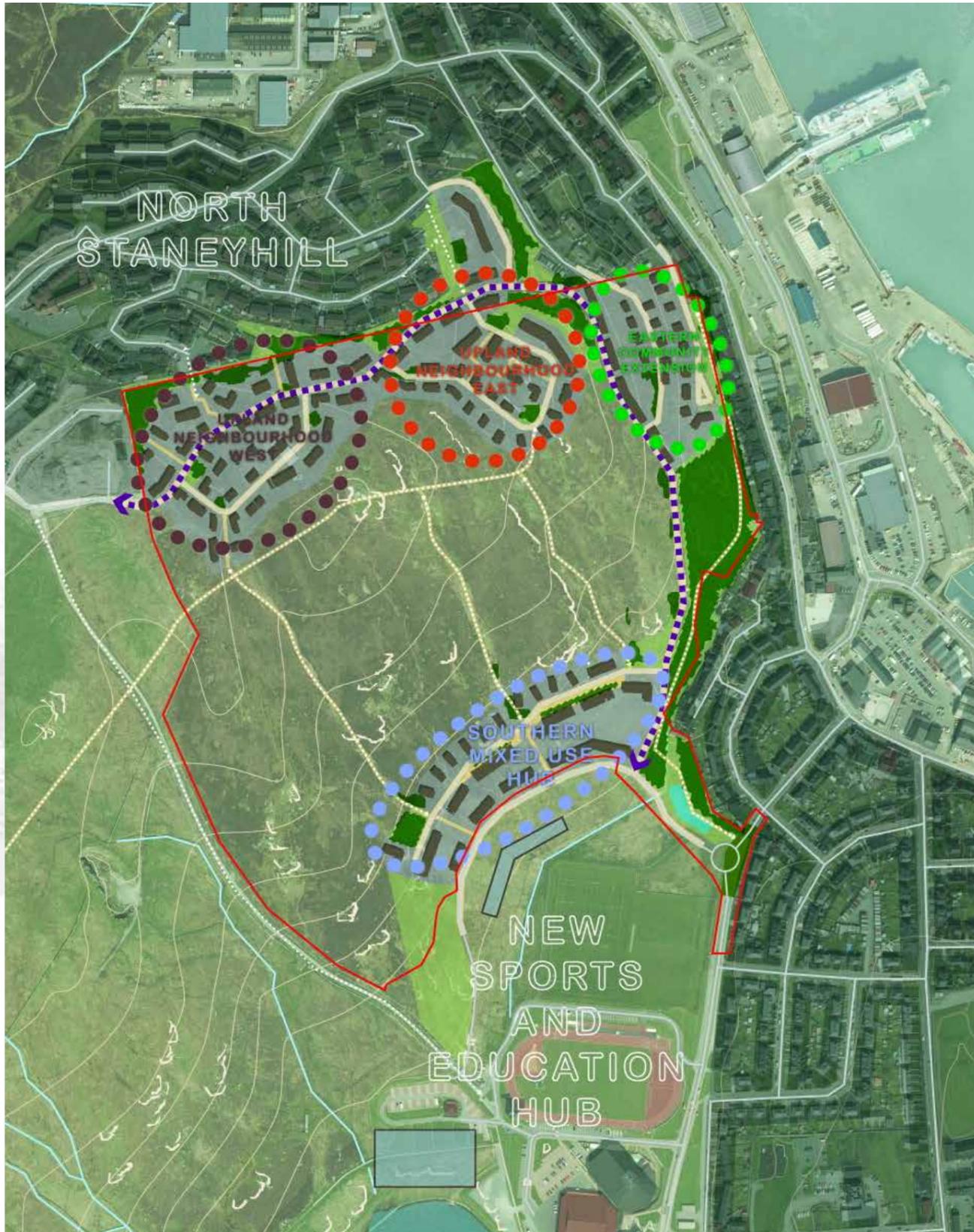


Figure 49: Early definition of character areas for the site

Figure 50: Early stages of development of developable areas, and Staneyhill character, through plan and 3D development



6. DESIGN JOURNEY

VIEWS

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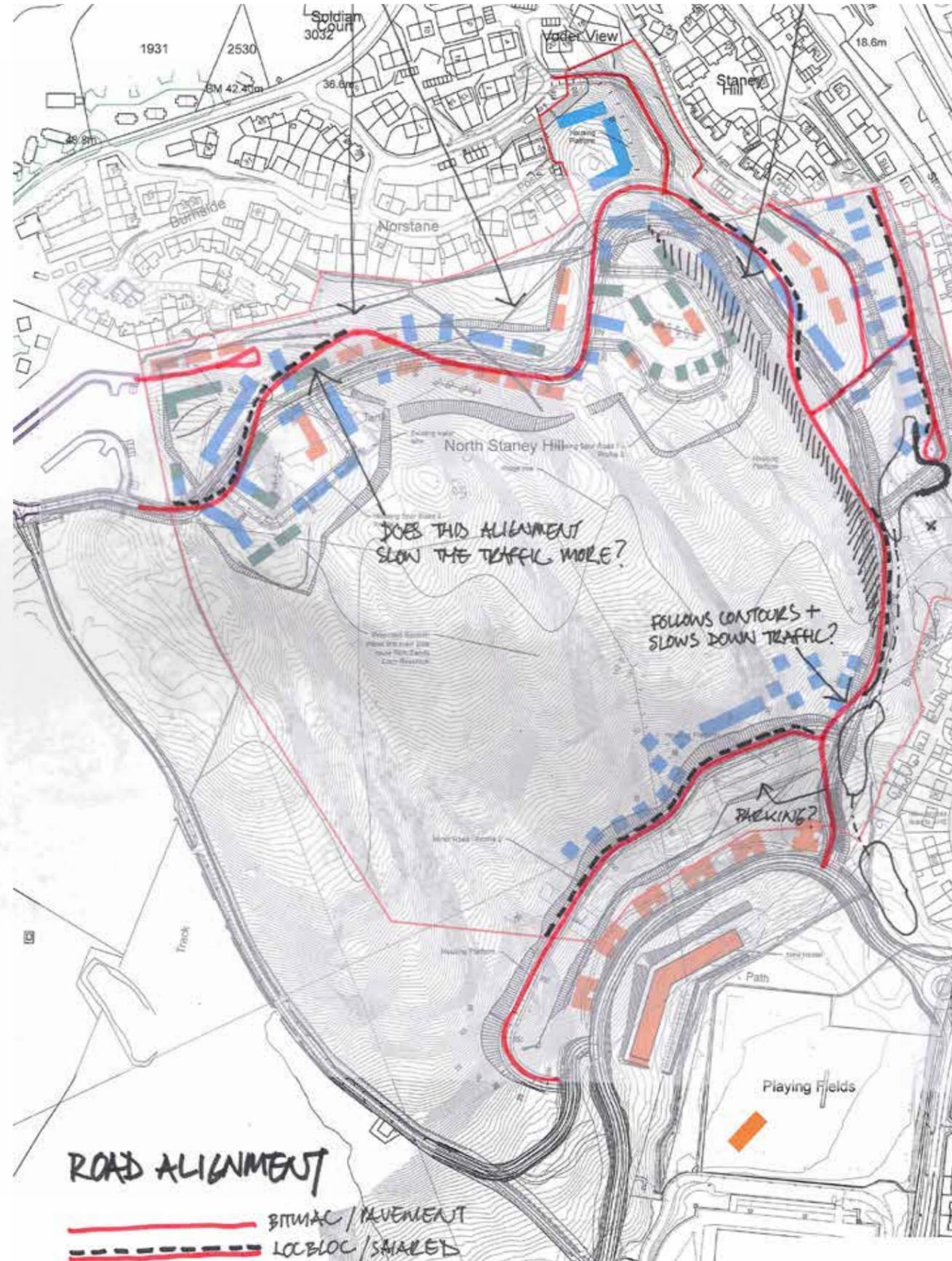
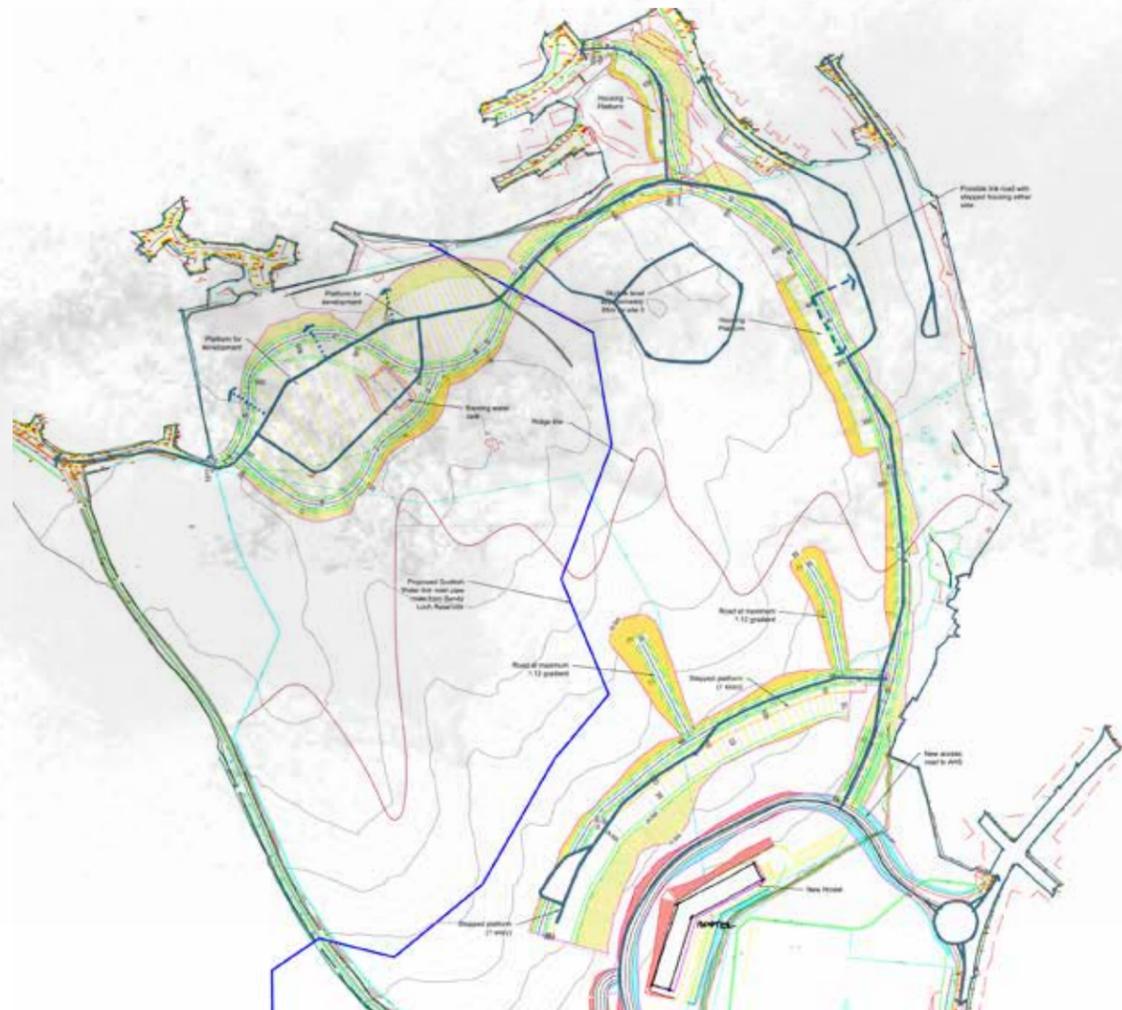
ASPECT

6.33 Aspect, microclimate and shelter were central to design decisions.

TESTING

6.34 Initial layouts looked at numbers density and form of the housing. Whilst layouts resembled suburban forms, similar to the Grodians scheme the detail and layout of public spaces, the proximity of houses and

Figure 51: Iglu road alignment mark up aug 2016, road Layout V6
Figure 52: Mark up road alignment 16 dec 2016-1





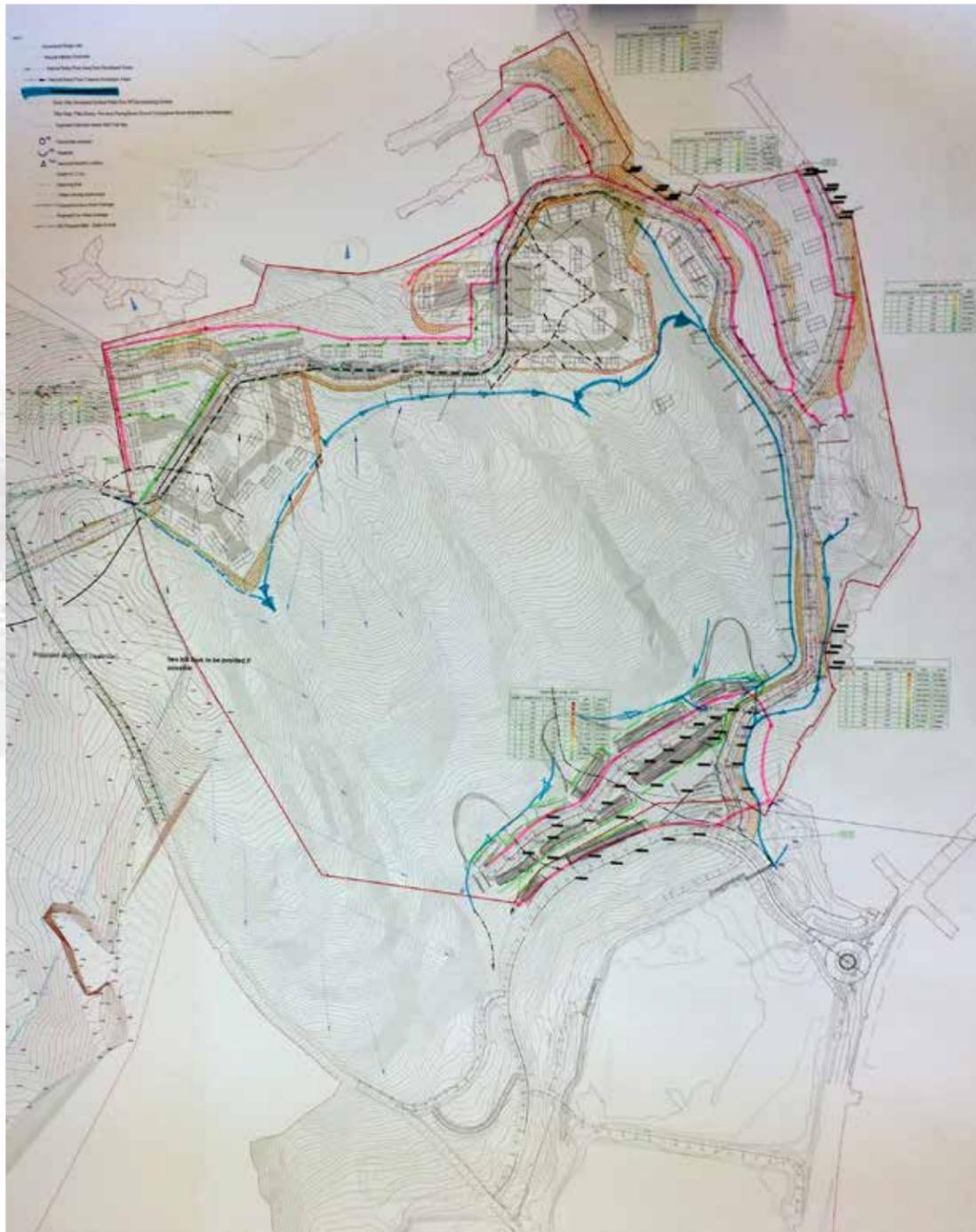
6. DESIGN JOURNEY

the treatment of boundaries and edges was always under review to make the scheme place specific.

CHARACTER AREAS

6.35 Further investigation of the site allowed us to identify five 'character areas'. Four of these were the areas in which housing will be concentrated. Each of these will be distinctive, their character being influenced by topography, the surrounding area and the microclimate. A fifth area was identified at the back of the existing houses of Burgess Street and the Old North Road. This area had been planted

Figure 53: Plans showing surface water management across site



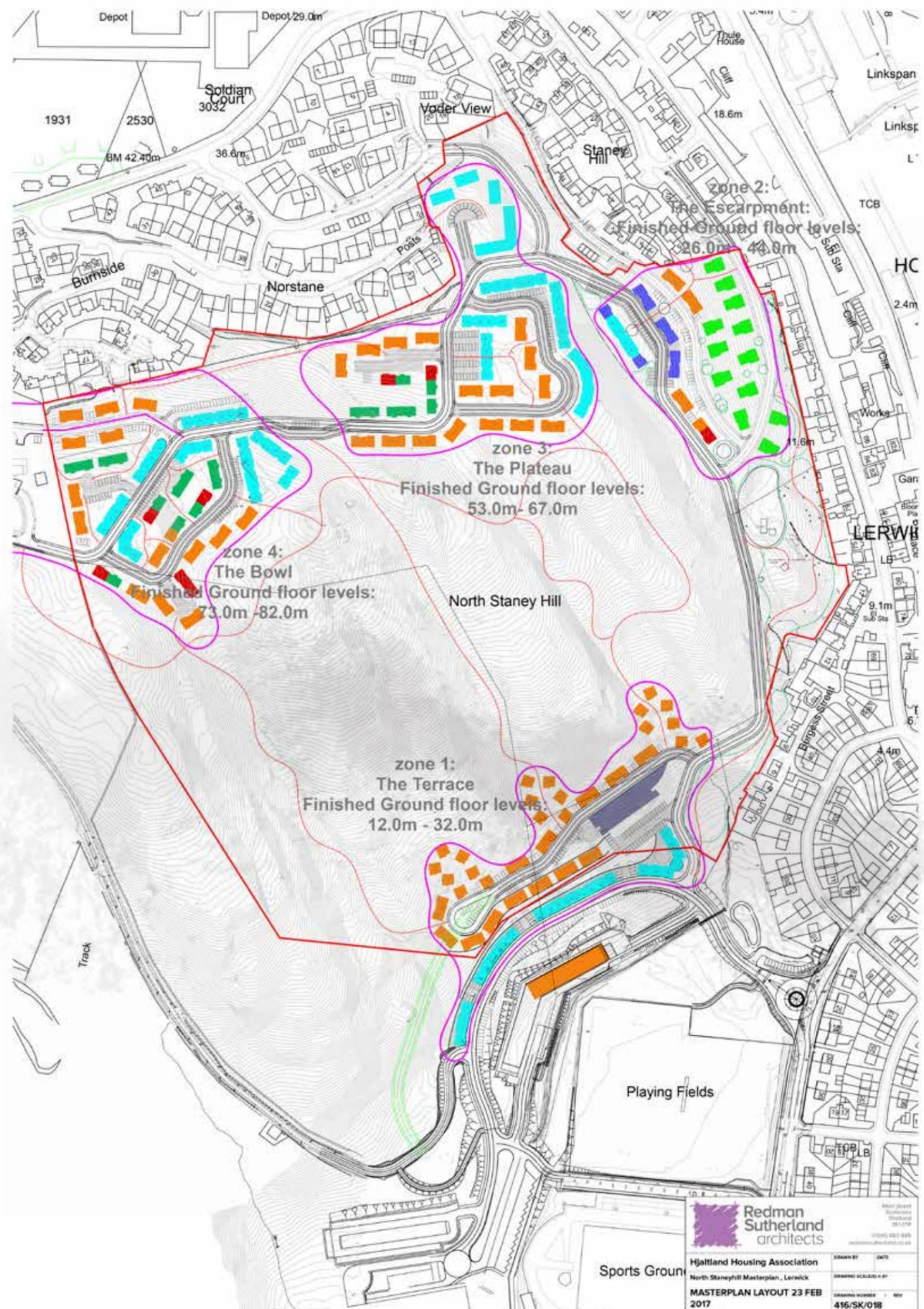
6. DESIGN JOURNEY

with trees by the local community and had been identified as 'Green Corridor' by SIC. It was thought that this area would not support any viable housing development and should be retained as landscaped amenity space, taking what the community had started and expanding the area to the north and south.

ROAD DEVELOPMENT

6.36 The road alignment design took a great deal of time. The vertical alignment was fixed and there was very little scope for altering this to marry with the contours. We also had to consider the horizontal alignment which we felt had to have more

Figure 54: Plan showing platforms for development areas in site



6. DESIGN JOURNEY

sharp bends and twists to control speed and to create character at the centre of the housing developments. We wanted to create the sense that the road had been constructed over a longer period of time with buildings built tightly around it rather than an urban freeway.

SUSTAINABLE DRAINAGE

6.37 Throughout the development of the road, the development of the sustainable drainage was an integral part of the design process. The inherent characteristics of the site, the topography, the geological make-up and the physical horizontal constraints, control the provision of the

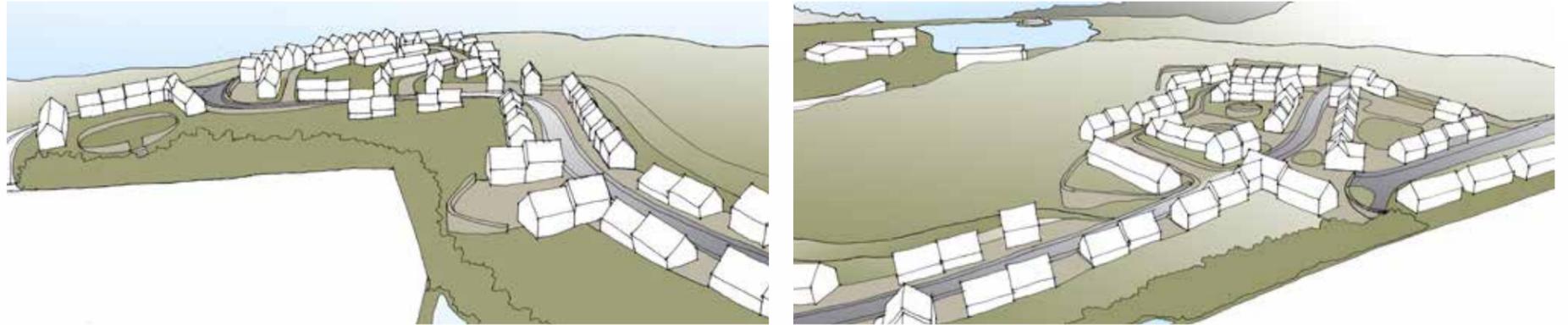


Figure 55: North 1

Figure 56: Plateau with escarpment below and bowl above

Figure 57: Terrace aerial



6. DESIGN JOURNEY

SUDs to a narrow scope of sites within the development area. In addition to these physical site constraints, other issues emerged through the consultation exercises, in particular the inclusion of drainage to reduce site run-off in to the neighbouring gardens

PLATFORMS

6.38 As the road, landform and primary requirements such as public open space, and SUDs were developed so the development of the platforms began to evolve and tighten. The layout changes were tested using modelling to ensure the Broch / skyline views were maintained and the housing fitted in to the landscape and steep contours. These massing models were translated in to block models as opposite.



MASSING

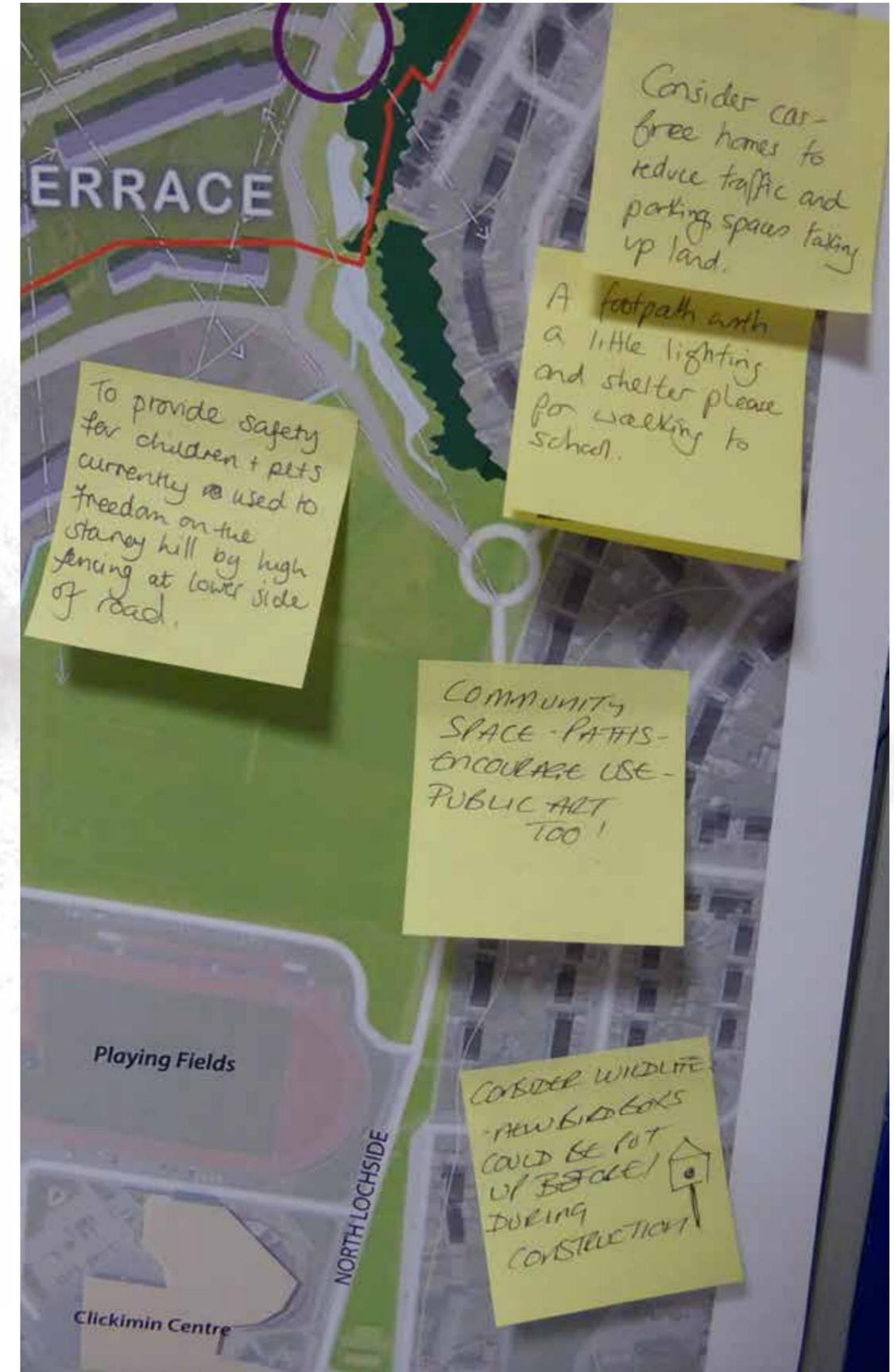
6.39 The massing of the housing was developed using the computer model as a 'white model' to determine the density of the development in each of the areas. The urban grain drawings identified important node points that were developed for the masterplan proposals which were again presented to the public.



Design development: Public Consultation 2

6.40 The second public consultation was presented to the public and received a very positive response. Again, details can be found in an appendix to this report. The second phase of consultation was undertaken in December 2016. Again, it involved a number of elements, including:

- press releases and subsequent press and radio coverage, including an interview
- press advertising in the Shetland Times and radio advertsing on SIBC
- the continuing use of Facebook
- explanatory leaflets
- questionnaires that included a Place Standard evaluation
- a public drop-in session at the Staney Hill Hall, at which local residents were able to see the proposals on display boards, discuss the proposals and leave comments



6. DESIGN JOURNEY



Figure 58: Results from one of the tables completing the Place Standard during the second community event

6. DESIGN JOURNEY

- 6.42 Where there were concerns, they were similar to those expressed in the first phase of consultation, notably around safety, traffic and parking where scores were between 3 and 4 out of a possible 7. The need to give people priority over cars was strongly expressed.
- 6.43 The proposals scored particularly well – 6 out of 7 – on the factors of Streets and Spaces; Play and Recreation; Facilities and Amenities; Work and Local Economy; Housing and Community; Social Interaction; Identity and Belonging; and Care and Maintenance.
- 6.43 During the second phase, residents reiterated the concerns they had earlier

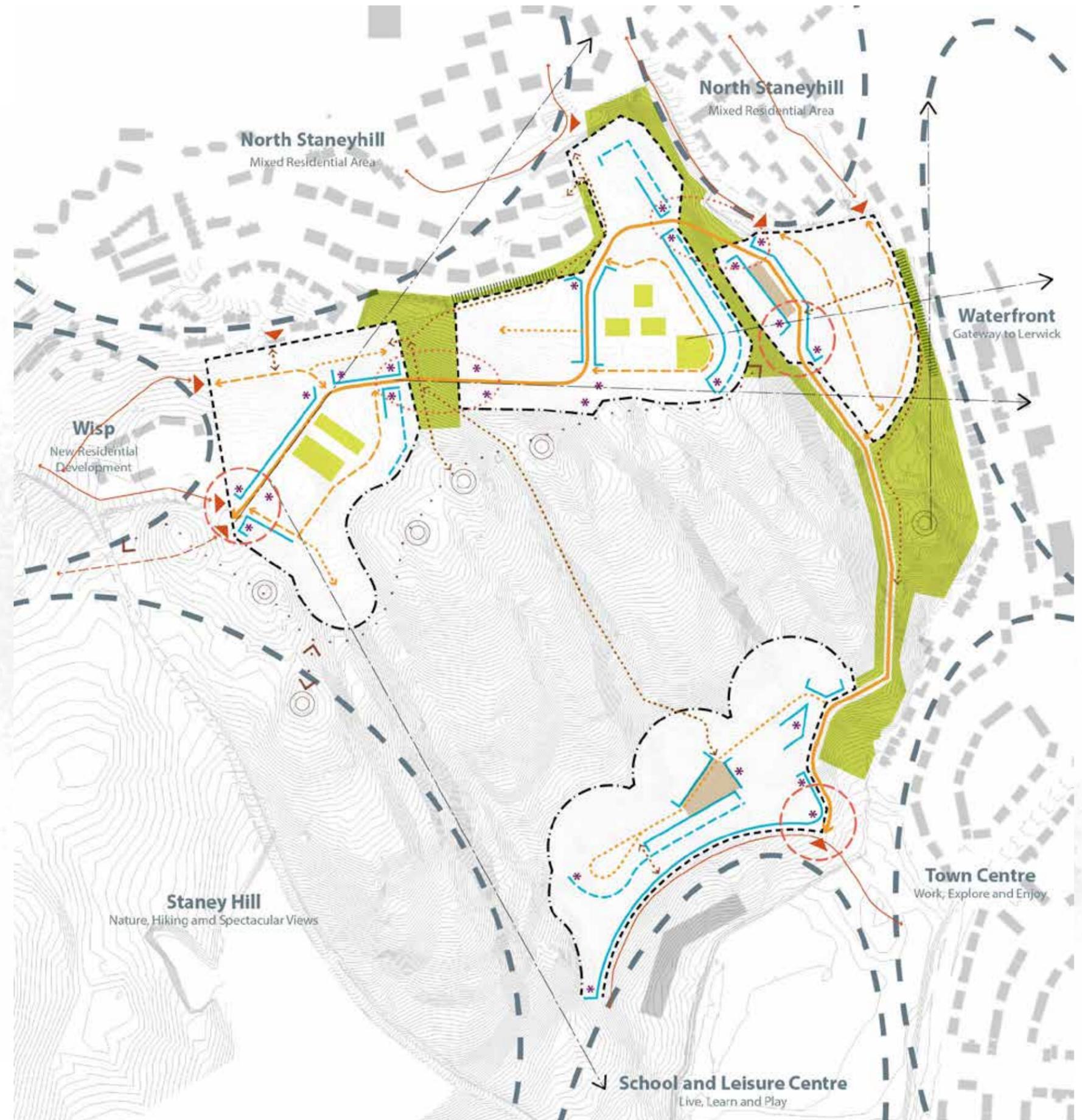


Figure 60: Parameter plan distilling the key design parameters for each development area

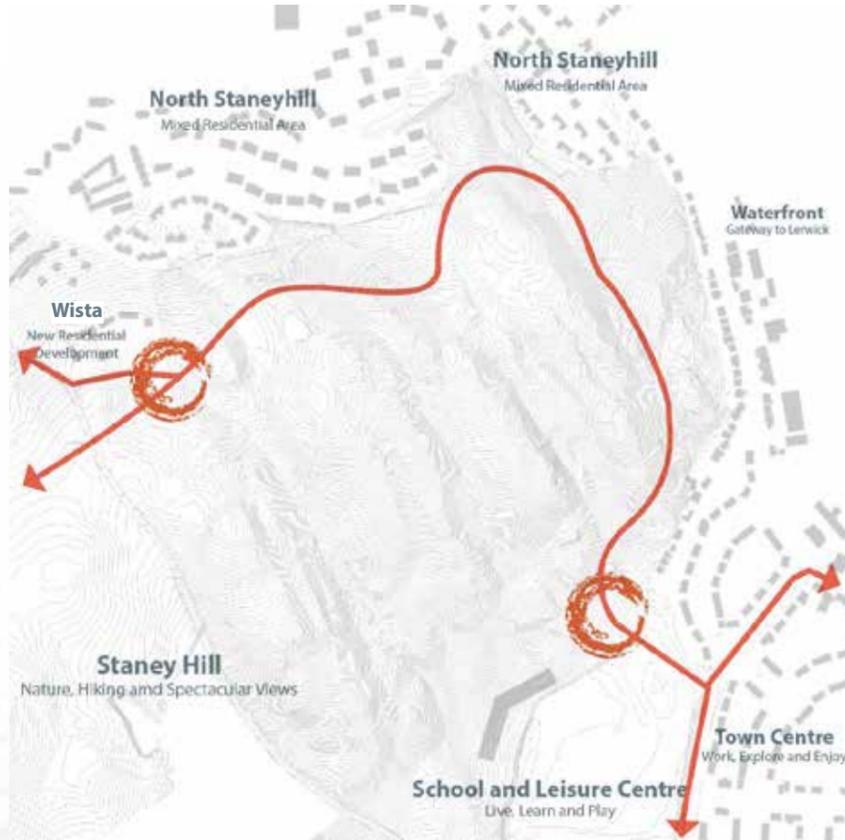
7. DESIGN PRINCIPLES

Design Principles	Source		
	Client Brief	Site Analysis	Consultation*
A. New Primary Street / Public Transport Corridor and clear Gateways into the site			
Provide good road and footpath connections between the north and south of the site	✓	✓	✓
Open up opportunity to expand westwards, with good connectivity to the town centre.		✓	✓
B. Housing Areas extending into the site from the north, the extent of which determined by visibility from the Broch			
Housing areas to optimise site's natural assets, including key views east across harbour to Bressay and south east to Lerwick town centre and beyond.		✓	✓
C. Complete hard urban edge of the town around Clickimin.			
Utilising existing and new infrastructure and facilities adjacent to the site.		✓	
Establishing area's role as Lerwick's main education and leisure hub with new mixed use development interface.		✓	✓
D. Creation of four new neighbourhoods.			
Layout of road network across site to restrict speed limit to 20mph.			✓
The main road runs through the centre of each neighbourhood.		✓	
Introduction of gateways defining arrival into each neighbourhood and establishing focal points for communities.		✓	✓
E. Retain moorland as accessible public open space.			
Maintain link between site and wider landscape, improve moorland as amenity and recreational resource for local communities and High School.		✓	✓
Ensure a soft boundary between natural moorland and the residential area.		✓	
F. Enhance the green corridor.			
Green corridor retained and extended	✓		✓
Footpath connection through moorland between residential areas in North Staneyhill to new high school, Clickimin and Lerwick Town Centre		✓	✓
G. Development must not break horizon line when viewed from the broch			
Development must not break horizon line when viewed from the broch	✓	✓	✓
H. Seek to create sheltered public and private spaces through the orientation of buildings and the use of existing or new land form.			
Seek to create sheltered public and private spaces through the orientation of buildings and the use of new land form.	✓	✓	✓

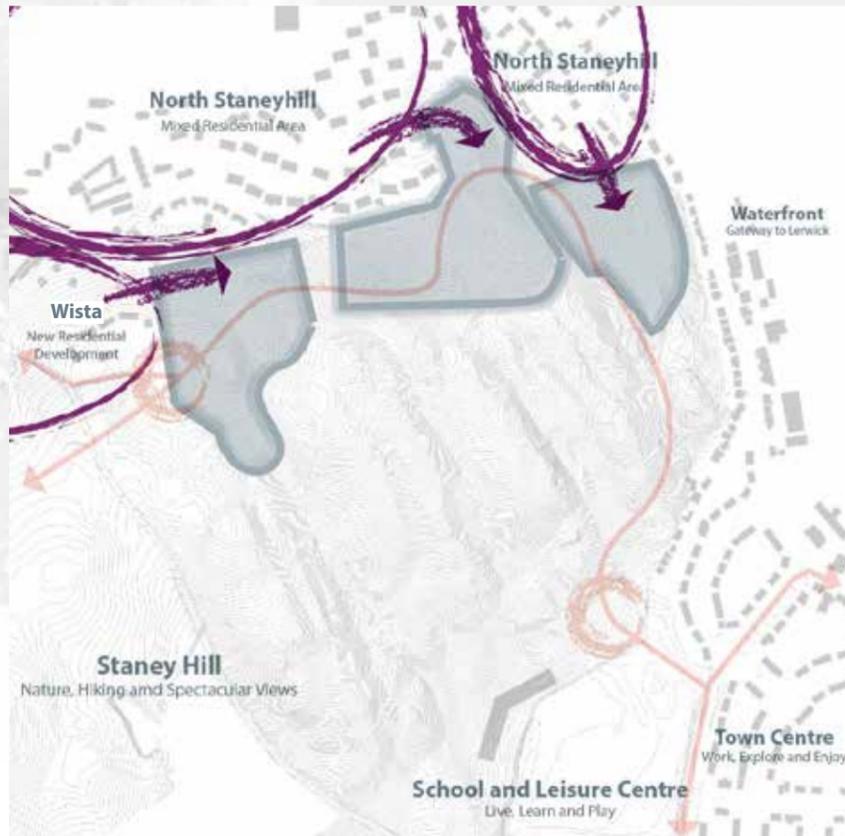
*Including discussions during the design process with the local community, client, Shetland Islands Council, Architecture and Design Scotland, Scottish Water and other statutory consultees

7. DESIGN PRINCIPLES

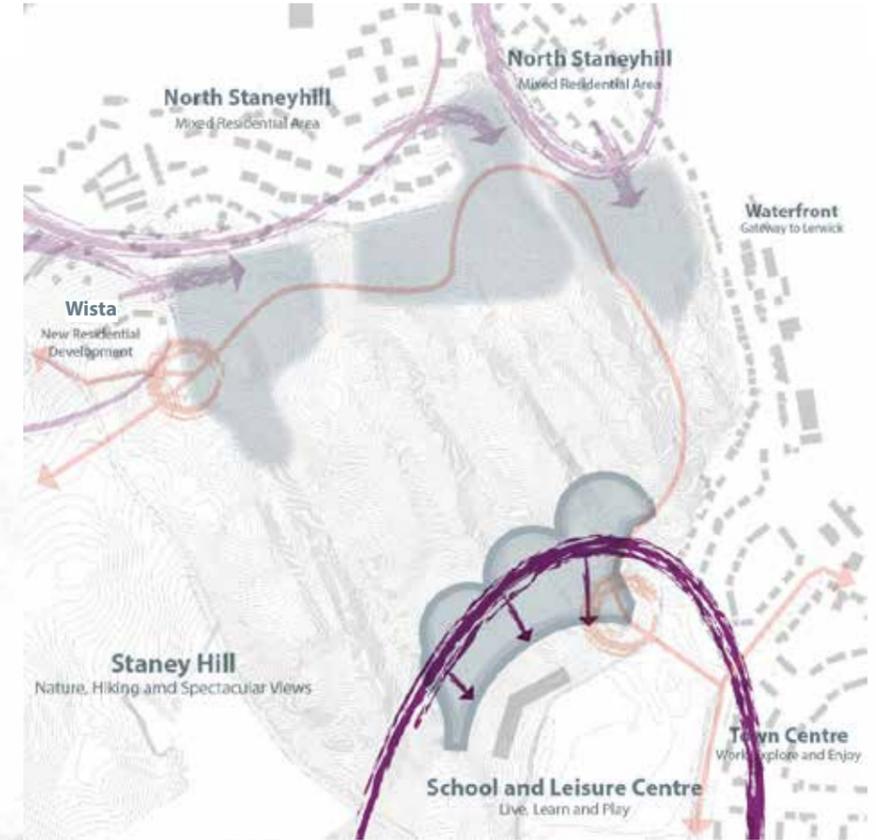
A. New Primary Street / Public Transport Corridor and clear Gateways into the site



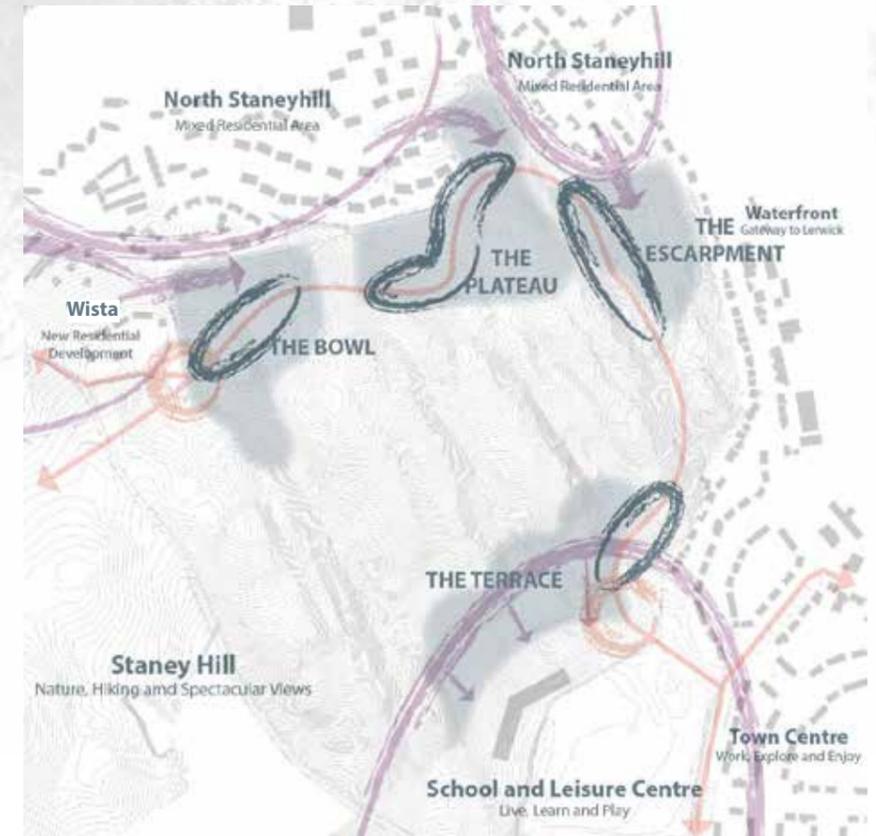
B. Housing Areas extending into the site from the north, the extent of which determined by visibility from the Broch



C. Complete hard urban edge of the town around Clickimin.

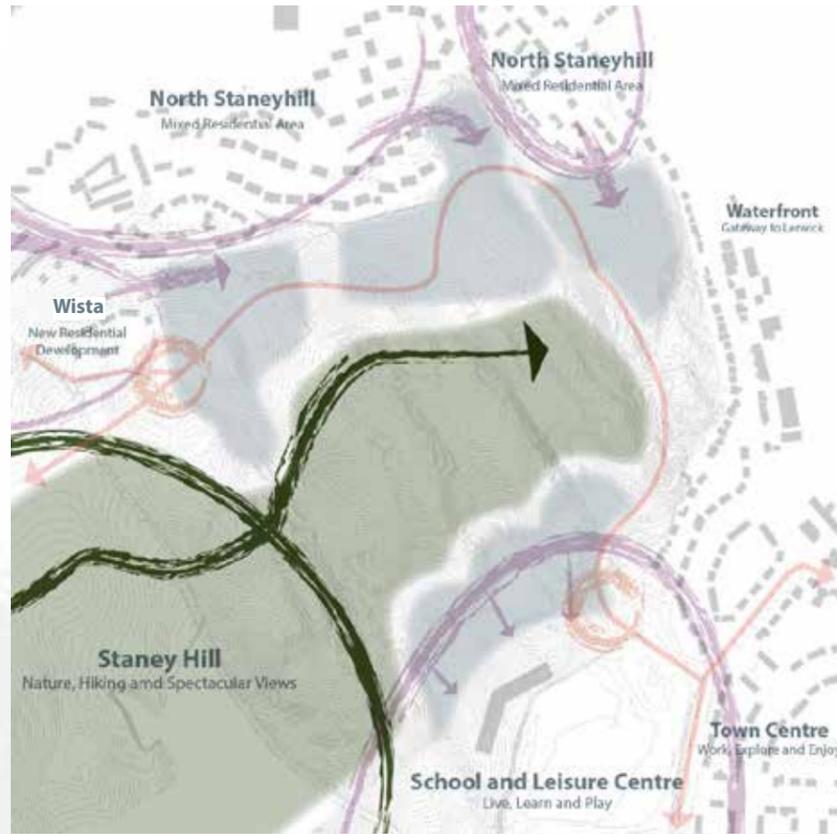


D. Creation of four new neighbourhoods.

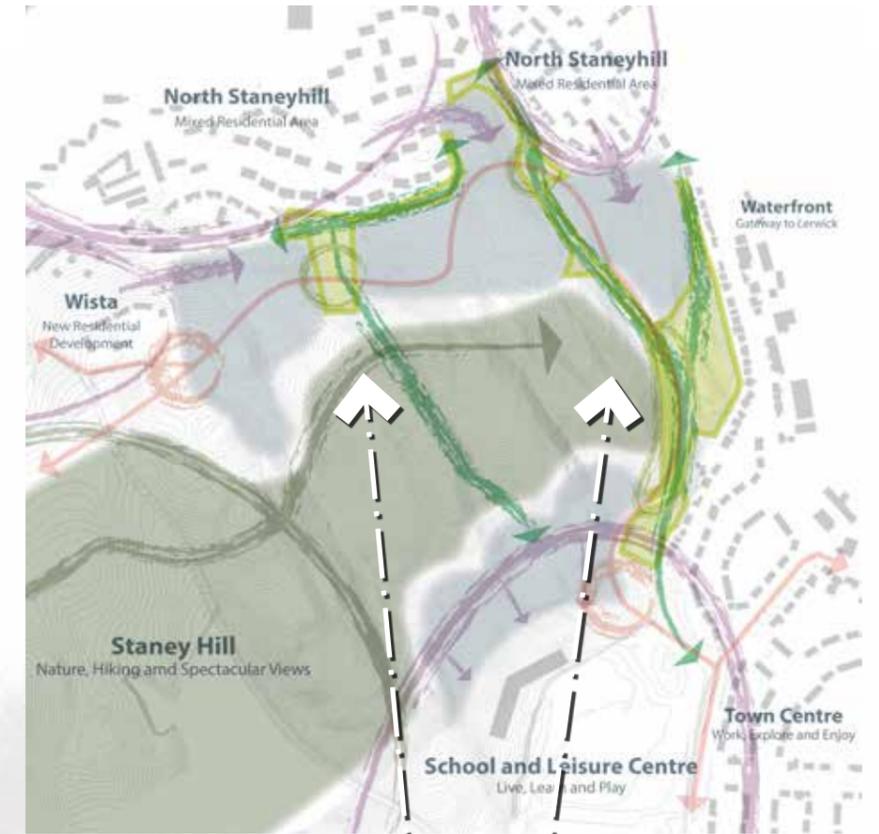


7. DESIGN PRINCIPLES

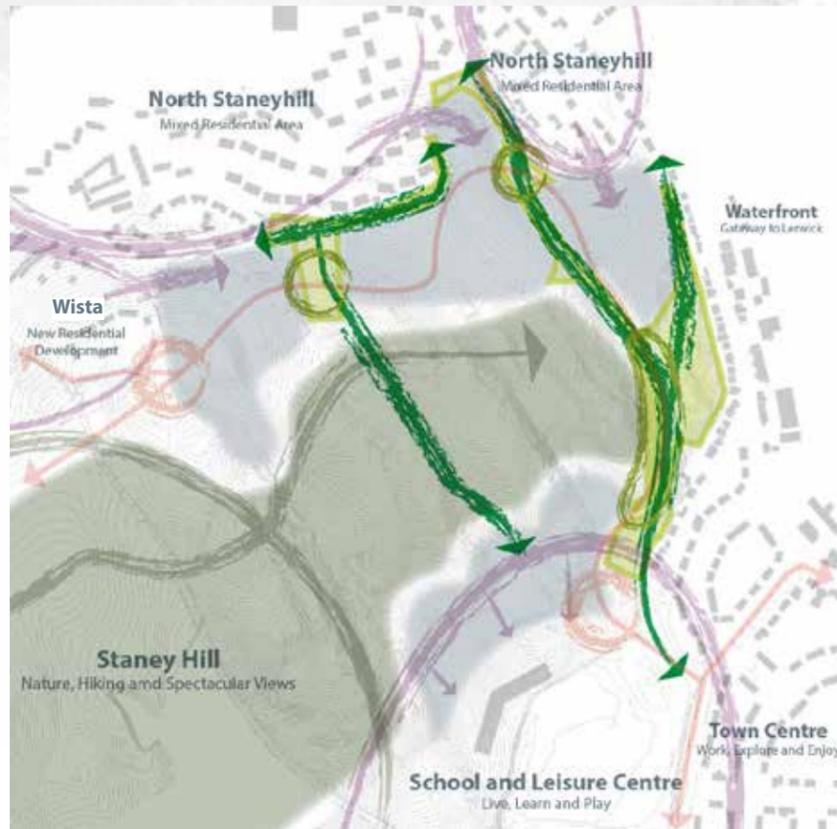
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