

**DRAFT REVISED HERITAGE INVENTORY OF THE TANGIBLE HERITAGE RESOURCES IN THE STELLENBOSCH MUNICIPALITY:
PHASE 3 REPORT¹**

Prepared by
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8 May 2018



¹ Excepting for the parts of the town of Stellenbosch itself for which heritage inventories have already been approved by Heritage Western Cape, and that are excluded from the contract.

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GLOSSARY

Balance and proportion

These terms have meaning across landscape, townscape and architecture/building contexts. In landscape terms, the relative quantities of different elements within the view affect balance. Criteria such as a 1/3 to 2/3 relationship (rule of thirds) can be used to assess how well balanced the landscape is in aesthetic terms. Temporal effects should be considered. Proportions may change with the seasonal addition or loss of elements.

Colour

The term has meaning across landscape, townscape and architecture/building contexts. With respect to landscape, terms it refers to the dominant colours of fields, woodlands, the built environment and other landscape elements. It includes any notable seasonal effects due to farming activity and seasonal change.

Cultural Landscape

A cultural landscape is a physical area with natural features and elements modified by human activity resulting in patterns of evidence layered in the landscape, which give a place its particular character, reflecting human relationships with and attachment to that landscape. The term was recognised as having significance by UNESCO in 1992.

Diversity

The term has meaning across landscape, townscape and architecture/building contexts. When considering landscape, this needs to be assessed in two ways. First, within the boundaries of the landscape type the minor variations of the landscape should be assessed to determine overall how uniform or diverse the landscape is. Second, the diversity of a typical composition should be evaluated. Additionally, trends for change should be borne in mind, i.e. whether the degree of diversity is increasing or decreasing.

Domain/s

Areas of wilderness, rural and urban first proposed by the Forester and 'Father of USA Planning', Benton MacKaye, in the 1920's.

Enclosure

The term has meaning across landscape, townscape and architecture/building contexts. Where elements are arranged so that they enclose space, this has an effect on the overall composition so that the space and mass become as one. It also has a great effect on scale and

mass, due to the interaction of the height of the enclosing elements and the distance between them.

Form

Form has meaning across landscape, townscape and architecture/building contexts. In landscape terms, it describes the shapes of fields, woods, of linear features, of landform. For example, rectangular, curvilinear, rounded, flat, etc. It is a very important factor in defining ancient or planned landscapes. We pick out forms and shapes very quickly, often on slight evidence.

Grading

The meaning is that given in the South African Heritage Resources Act (Act 25 of 1999).

Grain

The texture inherent in physical form/s. Grain may range from 'fine' to 'coarse'.

Heritage Significance

The meaning is that given in the South African Heritage Resources Act (Act 25 of 1999).

Landscape

An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors. (Article 1, European Landscape Convention Council of Europe, 2002). The explanatory note expands on this definition as follows: "Landscape" is defined as a zone or area as perceived by local people or visitors, whose visual features and character are the result of the action of natural and/or cultural (that is, human) factors. This definition reflects the idea that landscapes evolve through time, as a result of being acted upon by natural forces and human beings. It also underlines that a landscape forms a whole, whose natural and cultural components are taken together, not separately."

Landscape capacity

The ability of a landscape to accommodate different amounts of change or development of a specific type. Capacity reflects the landscape's sensitivity to the type of change, and the value attached to the landscape, and is therefore dependent on judgements about the desirability of retaining landscape characteristics and the acceptability of their loss

Landscape character

The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape.

Mass / Massing

The terms have meaning across architecture/building, townscape and landscape contexts. The bulk, size and height of object/s and their appearance relative to their setting.

Not Conservation Worthy

The meaning is that given in the South African Heritage Resources Act (Act 25 of 1999).

Pattern

A repetitive, regular and intelligible juxtaposition of physical elements in space. See, for example, Christopher Alexander et al. (1977) *A Pattern Language*, Oxford University Press.

Scale

Scale has meaning across landscape, townscape and architecture/building contexts. It is generally referred to along a continuum spanning from large to small. In landscape terms, the overall scale of the landscape must be assessed once the factors that define it have been established. These include the degree of enclosure by landform or woodland and the main positions from which the landscape is viewed - scale increases with elevation and distance. Scale is closely related to balance, proportion and enclosure.

Scenery

The natural features and backdrop of a landscape or townscape considered in terms of their appearance, especially when picturesque.

Sense of place

The term has meaning across architecture/building, townscape and landscape contexts. The term 'sense of place' captures the identity of places we recognise. It embraces natural and cultural features, the distinctive sights, sounds and experiences rooted to that place, its atmosphere and people. Places with a strong 'sense of place' have a clear identity and character that is recognisable by inhabitants and visitors alike.

Texture

The term has meaning across architecture/building, townscape and landscape contexts. The meaning varies according to scale, but can be defined in relative terms as coarse, intermediate or fine. In the realm of landscape, texture is determined by crops, tree cover, size of trees, species, size of fields, etc. It is an important contributor to design unity and diversity, susceptible to change by addition or loss of elements. See also 'Grain' and 'Mass / Massing'.

Unity

The term has meaning across architecture/building, townscape and landscape contexts. The repetition of similar elements, balance and proportion, scale and enclosure, all contribute to unity. The degree to which contrasting elements disrupt a composition depends also on the context. In landscape consideration, for example, a single quarry in the midst of an otherwise unified landscape pattern may cause a high degree of discontinuity.

Viewshed

The geographical area that is visible from a location. It includes all surrounding points that are in line-of-sight from that location and excludes points that are beyond the horizon or obstructed by terrain and other features (e.g., mountain or hill crest-lines, buildings, trees).

IN BRIEF

The project 'Heritage Inventory of, and Management Plan for, the Tangible Heritage Resources in the Stellenbosch Municipality' has reached another milestone: the end of Phase 3 of the project. The project encompasses 5 Phases, as follows:

- Phase 1: Concepts and Method;
- Phase 2: Survey and Draft Heritage Inventory;
- Phase 3: Report on the Draft Heritage Inventory;
- Phase 4: Draft Conservation Management Plan (CMP);
- Phase 5: Training of municipal staff.

This Phase 3 report embodies the revised and amplified Draft Inventory of Heritage Resources for all the portions of the Stellenbosch Municipality other than for those portions of the town of Stellenbosch prepared by others and already approved by Heritage Western Cape (HWC).³ The original version of this report (dated 5 March 2018 and entitled Phase 2b Report) was issued to the Stellenbosch Municipality, all relevant HWC registered conservation bodies and the public at large, via the Stellenbosch Heritage Foundation (SHF) website for comment as statutorily required.⁴ The comment period deadline was 6 April 2018. This revised version of the report (dated 8 May 2018) has taken into account all comments received (comments and responses are set out in Appendix 3)

The purpose of the report is to assist the Municipality to become compliant with the requirements of the National Heritage Resources Act (NHRA) (Act 25 of 1999) as soon as possible, as it currently and in the coming months seeks to define (or amend) appropriate urban settlement, development planning and infrastructure instruments, spatial development frameworks and the like, for the future.⁵

The main features of the report, including the revised Draft Inventory of Heritage Resources, proposed Heritage Areas and their proposed grading (as required by the NHRA), are hereby made public and will be submitted to HWC for their consideration and approval during May 2018.

Relevant documentation has been placed, and will continue to be available, on the website of the Stellenbosch Heritage Foundation:

www.stellenboschheritage.co.za/cape-winelands-heritage-survey-2

During the process of undertaking this work for the Stellenbosch Municipality, we have repeatedly been required to make comment, and

consult with other parties and consultants, on a range of development planning proposals. Inter alia, we have provided detailed comment from a heritage resources management perspective on the current Spatial Development Framework (SDF), particularly in relation to its conceptual underpinnings and principles. In our view, those principles are sound and should be made to endure in any revisions of the SDF. We have also commented on other proposals, including: some of the shortcomings of the current SDF, with recommendations for their redress and inclusion into any new proposed SDF; revisions to Urban Edges; and proposals by the national Department of Agriculture to remove Act 70 of 1970 restrictions on many farms, which we strongly challenge and advise against.

The culmination and main products of Phase 3 of the project (inclusive of Phase 2b work) are found in Section 5 of this report, where the consolidated Map of Heritage Resources is presented and described and the digital data and interpretations on which it is based are summarised, together with reference to the information in the Appendices. Section 5 includes our recommendations to both HWC and to the Stellenbosch Municipality.

Setting the stage for a Conservation Management Plan

The next phase of this project (Phase 4, starting in May 2018), is to prepare a proposed Conservation Management Plan for the Stellenbosch Municipality. It is important to remember that any heritage inventory that is to be managed by a CMP is a living document.

The preparation of the CMP will require considerable liaison with planning officials within the municipality, as well as officials of HWC. Our aim is to develop as rational, systematic and practical a way as possible for the municipality to manage surviving heritage resources, as well as a system to manage development applications in a way that is coordinated with the heritage inventory and the CMP. It may be necessary for the Stellenbosch Municipality to administer these matters in concert with heritage authorities (HWC and the South African Heritage Resources Agency (SAHRA)), as appropriate, depending on competence and jurisdiction in each case.

Because it is the function of the CMP to mediate between the requirements of heritage into the future, on the one hand, and appropriate development planning for growth and change within the municipality into

³ The previously defined Historic Core of Stellenbosch and the Stellenbosch University Campus.

⁴ The conservation bodies are: the Stellenbosch Heritage Foundation; the Stellenbosch Interest Group; and the Franschhoek Valley Trust and Ratepayers' Association.

⁵ In all such cases an up-dated inventory of heritage resources is required and has to be approved by HWC and/or SAHRA, as the case may be.

the future, on the other, inter alia the CMP is likely to entail and propose some interpretation and even a modicum of compromise in respect to the spatial interface of heritage and development planning. In turn, therefore, Phase 4 work is likely to include some amendments to the Heritage Inventory, here proposed as part of Phase 3 of the project. At the conclusion of Phase 4 the CMP and the revisions / additions to the Heritage Inventory will be submitted to HWC for their approval, as required by the NHRA.

ACKNOWLEDGEMENTS

We thank the Stellenbosch Heritage Foundation for kindly extending the use of their website as a platform for documents related to the project, which have been, and are, thereby made freely available to the interested public.

We thank the many persons and organisations who have made contributions to the project, have engaged with us over the past many months and weeks and have provided comment on the original version of this report: we have learned a great deal from them.

Finally, we wish to thank all our team members and consultants on this project.

LIMITATIONS

Although we have done our best in the preparation of this Draft Heritage Inventory for the Stellenbosch Municipality, it may be that, for one reason or another, we have not included some heritage resources that should be included. As any heritage inventory is a 'living document', it needs to be updated as knowledge of missing heritage resources is brought to the attention of the municipality and heritage authorities.

There are a few instances where we know that heritage resources have not been fully itemised in this current version of the Draft Inventory of Heritage Resources in the Stellenbosch Municipality. These are:

- Resources identified as part of the Ida's Valley National Heritage Site nomination.⁶

⁶ This was prepared by Fabio Todeschini and Penny Pistorius years ago and given to SAHRA. SAHRA has been unable to find the individual site records information, which we wanted to include in the inventory. One way or another, we will ensure that the appropriate information about the Ida's Valley heritage resources will be included in revisions to the Draft Heritage Inventory as part of Phase 4 work of this project.

1 INTRODUCTION

The Stellenbosch Municipality awarded a project entitled 'Heritage Inventory of, and Management Plan for, the Tangible Heritage Resources in the Stellenbosch Municipality'⁷ to the Cape Winelands Professional Practices in Association (Pty) Ltd. towards the end of 2015. The area of study is shown in figure 1 (the municipal area in context).

The lead practitioners are Fabio Todeschini (Architect, City Planner, Urban Designer and Heritage Practitioner fabiodesigncape@gmail.com) and Liana Jansen (Landscape Architect and Heritage Practitioner mulliana@gmail.com). Consultants on the project are: Claire Abrahamse (Architect, Urban Designer, Heritage Practitioner); Marike Franklin (Candidate Landscape Architect); Dr Antonia Malan (Historical Archaeologist); Tracey Randle (Historian); Jenna Lavin, Kyla Bluff, Nicholas Wiltshire and Geoffrey Wiltshire of Cedar Tower Services, dealing with all GIS matters;⁸ and Shawn Johnston, of Sustainable Futures ZA, who takes care of public participation.

A Phase 1 report on the project, entitled *Approach, Concepts, Method and Preliminary Findings* was produced in April 2016, and a Phase 2a report entitled *Preliminary Draft Heritage Inventory of Large-Scale landscape character areas in the Rural Domain of the Stellenbosch Municipality Informing Proposed Heritage Areas* were produced and approved by Heritage Western Cape in January 2017. Together with other project documents, both these reports have been available to the interested public at large via the website of the Stellenbosch Heritage Foundation:

www.stellenboschheritage.co.za/cape-winelands-heritage-survey-2.

The original version of this Phase 3 report (inclusive of Phase 2b), comprising a report and amplified inventory of tangible heritage resources located across all domains of the municipality (wilderness, rural and urban), was dated 5 March 2018. This Phase 3 report replaces the Phase 2a report, which was a preliminary inventory limited to sites in the rural domain. Both the Phase 2a and Phase 3 reports rely on the same macro (top-down) information relating to the larger wilderness and rural domains, and as that material is to be found in the Phase 2a report, only a selection of the maps

⁷ Excluding those portions of the municipal area (historic core and university properties) for which Heritage Inventories have already been submitted to, and approved by, Heritage Western Cape.

⁸ Geographic Information Systems (electronic and digitised).

are included in this Phase 3 report. The interested reader may consult the Phase 1 and Phase 2a reports at the SHF website (as above).

The original version of the Phase 2b report included the findings of additional, very extensive and detailed (bottom-up) fieldwork undertaken since January 2017 (the end of Phase 2a).

The fuller survey and Draft Heritage Resources Inventory (dated 5 March 2018) was presented to the municipality, registered conservation bodies and the general public for a period of 30 days for their comment. The comments received and our responses thereto (including additions to the further revised Draft Heritage Resources Inventory) are to be submitted to Heritage Western Cape for their approval during the course of May 2018.

The Stellenbosch municipal area (figure 1) encompasses a wide array of wilderness, rural and urban domains, giving rise to composite cultural landscapes. Diverse peoples have long inhabited these landscapes and the many adaptations made over that time comprise many positive landscape and settlement layers, as well as some negative intrusions thereon. Because of the complex evolution and historical factors involved, a key to the project method has been to devise ways of analysis and synthesis across 'nature' and 'culture' and at different scales of consideration.

As the ultimate purpose of the Inventory of Heritage Resources is to inform a Management Plan, this project seeks to conserve and manage the positive aspects, to mitigate the negative ones and to provide a basis for making decisions about appropriate future developments.

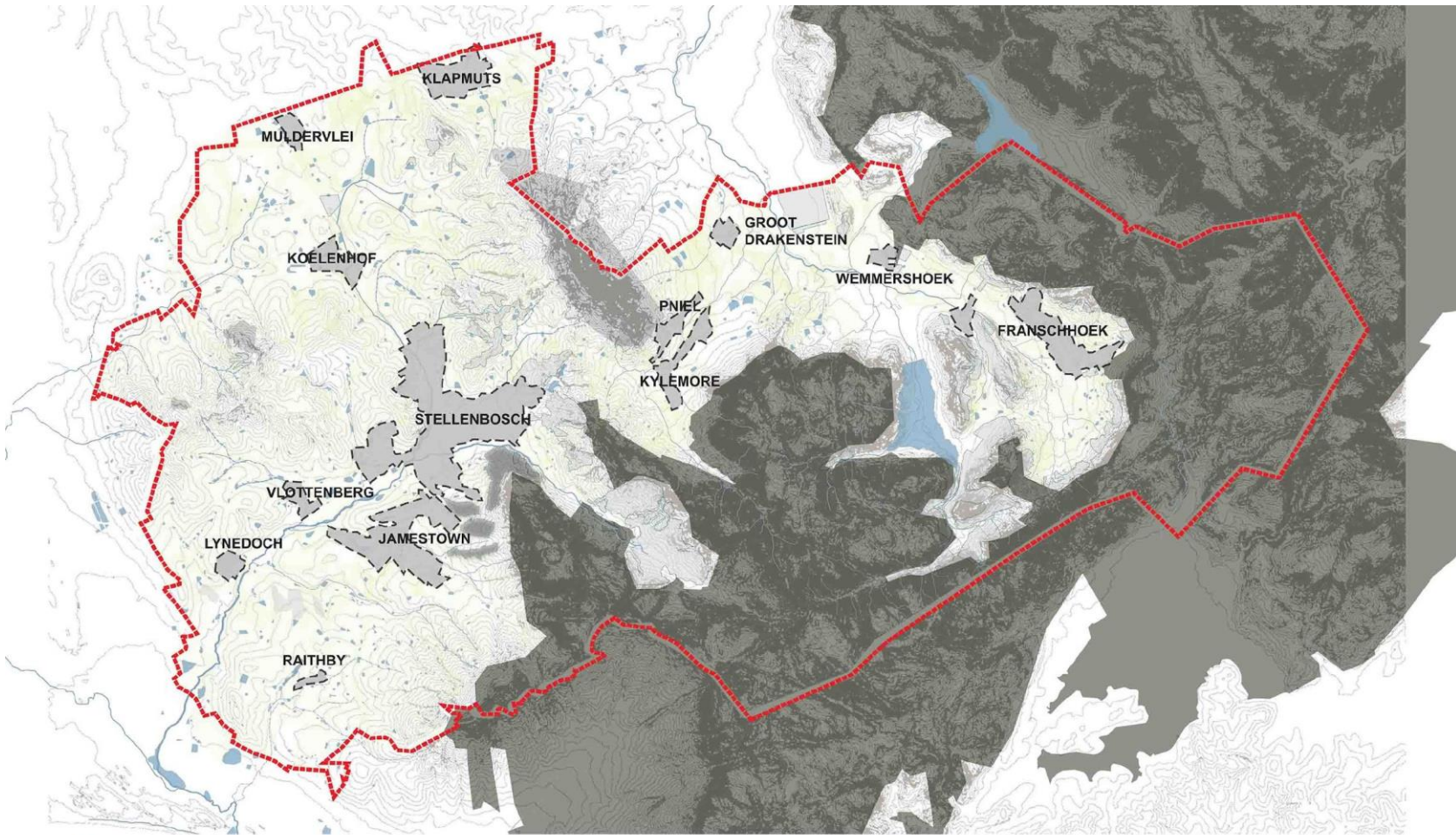
A Heritage Inventory is the essential base component to the Conservation Management Plan. Its aim is to identify surviving heritage resources and assess their significance. It is also a 'living document' that can be expanded and must be kept updated. It assists in managing change with due regard to the significant heritage resources that have endured and which should be respected for the common good.

The next phase of this project (Phase 4, starting in May 2018), is to prepare a proposed Conservation Management Plan for the Stellenbosch Municipality. This will require considerable liaison with planning officials within

the municipality, as well as officials of HWC. Our aim is to develop as rational, systematic and practical a way as possible for the municipality to manage surviving heritage resources, as well as a system to manage development applications in a way that is coordinated with the heritage inventory and the CMP. It may be necessary for the Stellenbosch Municipality to administer these matters in concert with heritage authorities (HWC and the South African Heritage Resources Agency (SAHRA)), as appropriate, depending on competence and jurisdiction in each case.

Because it is the function of the CMP to mediate between the requirements of heritage into the future, on the one hand, and appropriate development planning for growth and change within the municipality into the future, on the other, inter alia the CMP is likely to entail and propose some interpretation and even a modicum of compromise in respect to the spatial interface of heritage and development planning. In turn, therefore, Phase 4 work is likely to include some amendments to the Heritage Inventory here proposed as part of Phase 3 of the project. At the conclusion of Phase 4 the CMP and the revisions / additions to the Heritage Inventory will be submitted to HWC for their approval, as required by the NHRA.

The heritage resources of the Stellenbosch municipal area are significant when viewed internationally, nationally, provincially and locally and they contribute in a major way to the local economy. Their value has been underscored repeatedly since 2009, when the Cape Winelands was placed on the UNESCO Tentative List of World Heritage Sites, and further highlighted by the SAHRA Council's Declaration of 'Ida's Valley' and the 'Founders' Estate' as National Heritage Sites some years ago. Moreover, the study area falls within The Cape Winelands Biosphere Reserve (CWBR), an internationally-proclaimed area within the Cape Floral Kingdom in South Africa (a formally declared UNESCO Serial World Heritage Site). The bioregional approach taken by the Western Cape Provincial Government regards it as essential that landscapes are managed in a holistic and integrated manner so as to ensure the consolidation and continuation of ecosystems and habitats.



STUDY AREA AND DOMAINS

- Legend
- Stellenbosch Municipality
 - Wilderness Domain (as per existing conservancies)
 - Rural Domain
 - Urban Domain (as per 2009 SDP)
 - urban edge

Figure 1: Study Area and Domains

The tourism sector has overtaken mining in South Africa's economy, and tourism is indeed very important as an income source in local municipal affairs.⁹ The graph below reflects tourist appreciation for the wide range of resources we have inherited from the past, including the landscapes and architectures of the Stellenbosch winelands. The importance of maintaining and, where possible, enhancing the significant wilderness and rural landscapes is underscored thereby, while the architecture of settlements also plays a part in tourist appreciation.

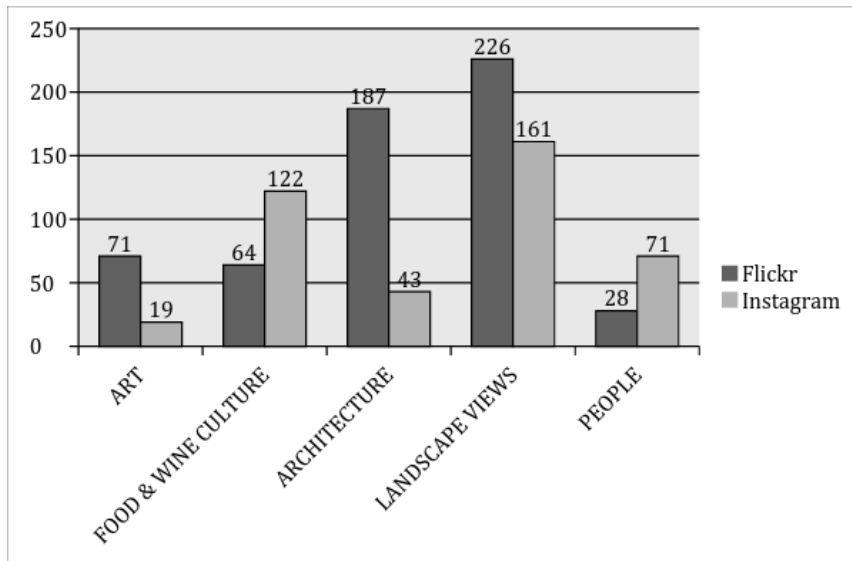


Figure 2: Content of Flickr and Instagram images according to genre categories in the Stellenbosch winelands (Bordelon and Ferreira 2017).

During the process of undertaking this work for the Stellenbosch Municipality, we have repeatedly commented on, and consulted with, other parties and consultants in response to development planning proposals. We have provided detailed comment from a heritage resources management perspective on proposals such as: revisions of many of the urban edges of the numerous urban areas within the municipality; the proposed Integrated Development Plan (IDP); specific development proposals for existing urban

nuclei and areas; proposed changes to the rural road infrastructure (including by-passes around Stellenbosch); proposed development regulations; and proposals from the National Department of Agriculture to do with aspects of Act 70 of 1970. In our view, the currently prevailing Spatial Development Framework (SDF), particularly the declared conceptual underpinnings and principles thereto, should be carried over into any proposed revisions of the SDF. We have also provided views on some of the shortcomings of the currently prevailing SDF, so that they may be rectified in any new proposed SDF.

This report is structured as follows: Section 2 presents a narrative and related maps about the evolution of the cultural landscapes comprising the Stellenbosch Municipality, in order to understand the issues related to development into the future; Section 3 sets out the main features of the methods adopted for this study; Section 4 describes the inventory of heritage resources; and Section 5 sets out conclusions and recommendations that flow from the findings of this undertaking.

We have attempted to make the report readable and relatively concise by placing detailed material and findings in Appendices. Information is instantly available digitally via the Stellenbosch Heritage Inventory Online map. These resources are hosted on the Stellenbosch Heritage Foundation website.

Appendix 1 is a fascinating Archaeological, Archival, Oral and Spatial History report by Dr Antonia Malan, while Appendix 2 is a thorough report on the Public Participation process spanning the period from the commencement of the project in 2016 to the end of Phase 2b in March 2018. Appendix 3 is a schedule of the comments received on our Phase 2b report, together with all our responses thereto.

Appendix 4 comprises the Townscape Character Study relating to the various urban nuclei located within the study area. The complete Landscape Character Analysis of all the Valleys, Areas and respective landscape character units within the study area can be found in Appendix 5.

Appendices 6, 7 and 8 include some of the comments we have provided the Stellenbosch Municipality on a range of development proposals over the past months.

This final Phase 3 report is being submitted to Heritage Western Cape for their consideration and approval.

⁹ For example, see: www.businesslive.co.za/bd/business-and-economy/2016-12-19-tourism-employs-more-workers-than-mining-sector/ and www.fin24.com/economy/sa-tourism-trumps-mining-in-creating-jobs-20130917 and www.statssa.gov.za/?p=9264.

2 THE DEVELOPMENT OF THE CULTURAL LANDSCAPES OF THE STELLENBOSCH MUNICIPALITY OVER TIME

2.2 Introduction

The environments in which we live - inherited from the past and passed on as heritage to the future - are known internationally as 'cultural landscapes'. They are the combined products of two broad sets of 'drivers' and phenomena: the ecological (natural) and those occasioned by people (the socio-economic). Landscapes are also dynamic: they are in a 'state of becoming'. They have been changed, and will be further altered in the future, particularly in the context of our own time that is characterized by growing populations (increasingly urbanized) and by climate change.

However, responsibility for deciding what should endure and what should change has to be based on rational choice in the context of current knowledge and needs. Each generation must take stock of the general interests of social justice, sustainability, appropriate development and the desire for identity and memory, and then define a suitable development model that mediates between what and where there should be conservation, on the one hand, and where and what kind of development should be promoted, on the other.

The Stellenbosch municipal setting is ecologically complex and culturally varied, so the first step is to understand the broad outlines of how and to what effect the 'natural' setting has been adapted and adjusted by human actions over time. In particular, we set out to explain the major features of the spatial structure and order of these 'cultural landscapes': the influences and pressures that have resulted in their evolution and their current character. We describe the physical aspects of the cultural landscapes in the study area: the spatial 'armature' that underlies and gives

structure and order to the landscapes, and incorporate information reported elsewhere at greater length as part of this project (see Phase 2 Reports, including excerpts from the spatial history compiled from several sources by Dr Antonia Malan).

The various maps reflect the historical developments of the landscapes. Besides ecological constraints such as landform, streams and rivers, the maps depict a range of culturally made components: movement networks and nodes (including rail), passes, commonage, farmlands of various kinds, homesteads, settlements, plantations and forests, dams, a mine and so on. When compared, the sequence of maps reflects changes over time and, as we come closer to today, they show the overwhelming expanding suburbanization that eats ever more into the rural domain in many areas.

The aim of this section of the report is to help inform the reader and, in due course, municipal policy. Clearly, our standpoint is that of today, but looks both to the past and to the future. Our approach is to integrate physical and historic information into graphic presentations of landscapes. Overall, that is why our base 'canvas' is constituted by the 'natural constraints' as informants (figure 4) and our analytic procedure has been to overlay the additional elements of structural and spatial evolution brought about by people and events over time. The three broad domains of wilderness, rural and urban are to be found within various major and subsidiary valleys.

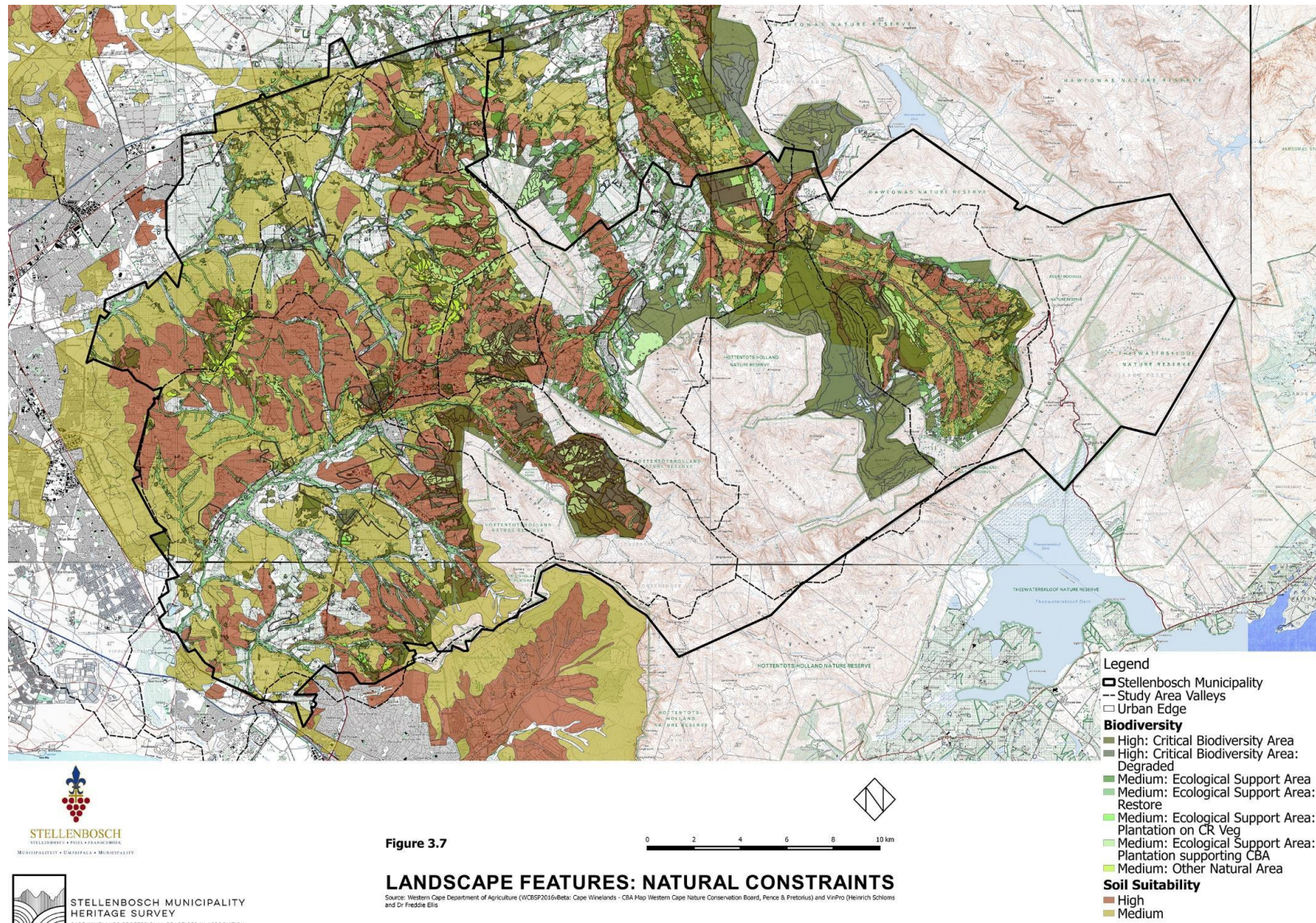


Figure 3: Landscape Features Natural Constraints.



2.2 The Pre-Contact and Early Colonial period

The study area was inhabited by hunter-gatherers for many thousands of years, though at the time that the first Europeans arrived Khoekhoe herders were the predominant inhabitants in the Stellenbosch district (for source references see Malan 2018). Hunter-gatherer groups in the Western Cape were either assimilated or displaced by groups practising a pastoralist subsistence strategy after about 2000 years ago. The Khoekhoen kept large herds of fat-tailed sheep, long-horned cattle and goats. Oxen were used as pack animals and for riding. This created broad trails where narrow paths had previously existed. Unlike the San, who lived in small bands generally fewer than 50 persons in number, the Cape herders lived in groups of often well over 100 persons. A number of Cape herder kraals in the district were recorded by the Dutch East India Company (VOC / Company). There was one between the Simonsberg and Paarl and one east of the Dwars Valley at Oliphantshoek (present day Franschhoek). Many place names retain a link to KhoeSan occupation and land use, for instance peaks and passes named after Bosjesmen or Hottentots and farm names ending in kraal. The people modified the ecosystem and the landscape. The paths they cleared through dense bush established routes. They set fire to hillsides and dense bush to encourage new growth, clearing fields. Their herds cropped back the grasslands and water meadows each year, keeping them clear. The people also left a number of rock art sites, mainly in the area around the Wemmershoek Dam, Franschhoek.

Colonisation and the collapse of the Khoekhoe economy brought to an end their status as independent livestock owners at the Cape. By the time that the smallpox epidemic hit the Cape herders in 1713 they were already in serious decline, robbed of the best pastures and involved in a series of internal conflicts and wars. The VOC used military force from 1659 to 1660 to break Khoekhoen resistance to the occupation of their land. Of greatest importance to the herders were VOC actions concerning land: the allocations to the first free-burghers (1657), and the marking out of farms in Stellenbosch (1679) and Paarl (1687). Simon van der Stel allocated land grants in the Stellenbosch area on a 'first come first served' basis and placed no legal limits on the size of the land claimed by colonists as long as it was cultivated within three years. He abandoned any semblance of alliances with the Khoekhoen and set himself as the person who had the right to approve the appointment of their chiefs. Ironically, the white landless Company servants now become landowners who possessed livestock. In 1672 the VOC signed two treaties with two groups of the Khoekhoen, the Goringhaiqua and the Gorachouqua, to defuse rising tensions over loss of

land. Apparently, the two Khoe groups agreed to surrender large tracts of land stretching from Table Bay in the south and Saldanha in the north and across to the Hottentots Holland in the east. To avert any doubt as to who now controlled the land, Company soldiers were quickly sent to occupy the Hottentots Holland area. The second Khoe-Dutch war (1673-77) was a response to VOC expansion into other areas as well. From then on the groups broke up and the remnant people found refuge in mission stations or went into the employ of the settlers as stockmen.

Grain was the primary crop demanded by the VOC but the settlers also planted fruit trees and vines and grew vegetables. It was however livestock farming that soon became the cornerstone of the emergent economy. It has been suggested that the first areas to be cleared of the indigenous vegetation were on the fertile alluvial areas along the banks of the streams and rivers where wheat, barley, rye and vegetables could be grown and the first vines could be planted. The palmiet beds were burned and channels were dug to provide flood irrigation to the plots and orchards. Tracks and roads became more defined. The farmers continued with the Khoekhoen pattern of burning to create more pasturage for sheep and cattle on the foot slopes of the mountains (and this practice lasted into the 1920s). The settlers also introduced exotic European trees to provide timber and crops like acorns for their pigs, and shade for their houses and tracks in the summer heat. The Cape remained dependent on imported slaves from Africa and Asia, sourced from throughout the VOC trading routes.

The major communication and transport routes to the Stellenbosch area from the main settlement at the Cape approached from the north-west as the sandy Cape Flats were impassable to wagons at that time. Wagon routes tended to parallel rivers in valley bottoms and served to provide access to the land grants and areas of pasture thereabouts. Much of the fabric of early passes that connected the disparate valleys has been obliterated by subsequent roads, but the three passes at the upper end of Franschhoek are still there, even if obscured by vegetation. The Olifants Pad, also used by the KhoeSan, went straight up the side of the mountain from Keerweder and was only suitable for four- or two-legged pedestrians. Much later (1818) a local farmer cut a basic road, Cat's Pad, which was steep and rough and not suitable for a fully-laden wagon. The new Franschhoek Pass by Major Holloway, Royal Engineers, 1825, was wide enough to allow two wagons to pass. Helshoogte, no doubt also an old foot trail, was used from 1687 by the first settlers to connect between the Eerste and Berg River valleys, shortly before the arrival of the French Huguenots. Several changes to the alignment of the pass have occurred since.

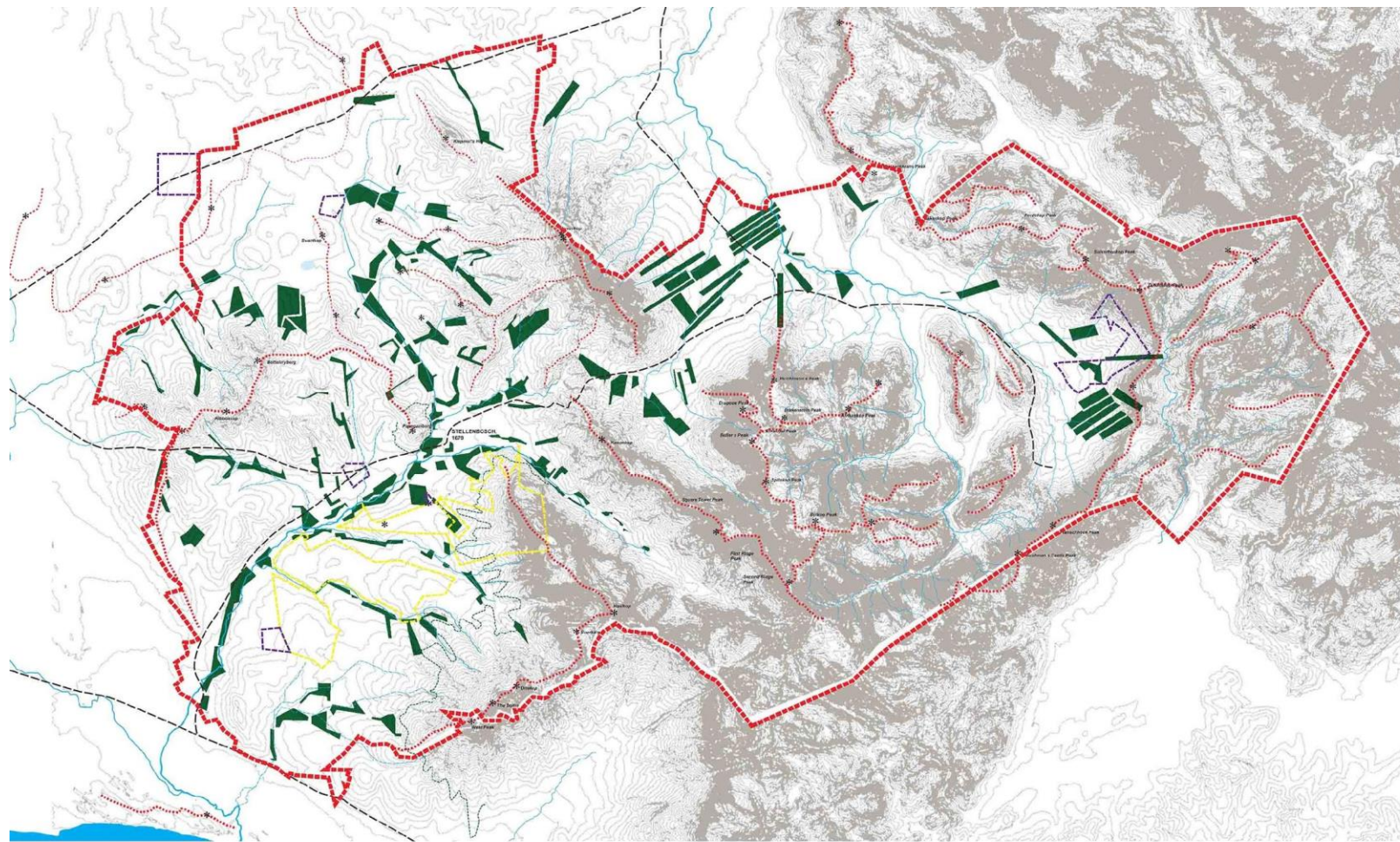
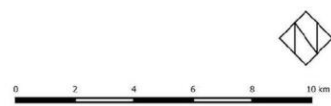


Figure 4.1



- Legend**
- Stellenbosch Municipality
 - ✱ Crestlines & Peaks
 - First Farm Grants
 - Wagon Routes
 - Historic Commonage
 - Historic Outspans
 - River Systems

DEVELOPMENT OF THE CULTURAL LANDSCAPE: 1657 - 1750

Figure 4: Development of the Cultural Landscape 1657 to 1750.

Leonard Guelke (1987) mapped the farms recorded in the first two volumes of freehold grants in the Deeds Office, 1657 to 1750. The owners needed access to a permanent freshwater source. In order to achieve this, the first farms were laid out as long narrow strips along rivers, or when unallocated land became scarcer, strips intersecting rivers. Well-connected people received relatively larger grants (figure 5). In general, property grants were of three main types of land: a building lot (erf) in town or village; garden land (tuinland) on the outskirts of settlements and in well-watered valleys; and agricultural farm land (plaats).

Visiting VOC Commissioner, Hendrik van Rhee de tot Drakenstein, was concerned at the haphazard system of farm land grants and decreed in 1685 that an ordered system should be instituted. He suggested that 60-morgen rectangular plots should be set out at right angles to the rivers. These can clearly be seen along the Berg River. One of the consequences of this system was that vast areas of land remained in VOC hands. This government land, although often more cultivatable than the grants, was only used for rough grazing.

In 1813 perpetual quitrent grants were introduced by the British government. The open land surrounding freehold grants came to be more formally carved up. It had actually been informally used throughout the 18th century by farmers and as Company and public outspans, and as the 18th century had worn on it was increasingly utilized as rental or quitrent property. By the early 19th century increasing numbers of these quitrents became permanent leaseholds that could be purchased and transferred the same as freehold property.

Besides land grants and agricultural practices, other features that help to sketch the adaptations made to the landscapes were 'Buiteposte', 'Elite properties', mining and homestead complexes. These are referred to sequentially below.

Buiteposte: The only Company outpost in the study area was Klappmuts (Clappmuts), established in 1657 on the grazing grounds of the Koina, who were forced off the Bottelary pastures. The post was located on the southern flank of the Klappmuts hill at a strategic location to oversee the grain and grazing lands in the area and to monitor the route between Table Bay and the Drakenstein. By 1683 permanent structures and kraals had been built, including a sheep kraal for 2000 animals and a long granary building.

Elite properties: There seems to have been a pattern of privatisation of well-positioned Company outposts, where the land adjacent was granted to members of the governing Van der Stel clique. In 1698 Simon van der Stel's Secunde, Elsevier, received 110 morgen next to the Klappmuts post, where he established Elsenburg. Klappmuts itself remained in Company hands

throughout the 18th century before becoming the residence of an ambitious British government employee, William Duckitt, in 1795 and passing into private ownership in 1821. Another strategically located property was Meerlust, granted to Henning Hüsing in 1693 near the Company's drift across the Eerste River on the road to Hottentots Holland, and next to his earlier grant of Welmoed (1690). Hüsing was a very successful colonist and favoured government meat dealer, but it is said that when his licence was given to cronies of the Van de Stels he decided to join the faction of free-burghers led by his nephew Adam Tas who opposed the governing Van der Stel family. Tas's property, Libertas, is another well-situated farm, where the road crosses the Eerste River to and from Stellenbosch.

The old VOC silver mine complex on the Simonsberg above Pniel is considered an extremely important industrial site, as it provides evidence for possibly the earliest (1740s) European mining operation in South Africa (but which was a scam).

During the 18th century, there was a tendency towards farm werf enclosure, in which buildings were linked by stretches of werf walls, a space-organising device denoting the extent of 'home' in the open landscape. Farm werfs were carefully designed, for instance with the homestead at the head of a forecourt, often splayed in layout to appear more impressive to the approaching visitor. The dwelling house was often raised on a platform and set against a mountain peak backdrop. The farmhouse ensembles in the Dwars River Valley display a full range of werf types from the relatively unstructured (Bethlehem) to the semi-structured, such as Goede Hoop with its off-axis stable block, Meerust's linear type werf, the highly structured Rhone with its splayed werf and Boschendal with its street-type werf. The range of gable styles is also wide, from the simple dormer gable of Goede Hoop to the curvilinear gables of Lekkerwyn and Meerust, and the neo-classical gables of Rhone and Boschendal.

2.3 Colonial expansion

The later 18th century was a period of great agricultural prosperity and expansion, especially in the wine industry. It was during this time that most of the larger, grander historical farm werfs were established, either newly built or altered/rebuilt to reflect the status and prosperity of the land owners (figure A).



Figure A: Boschendal with Hutchinson Peak in the background

Slave quarters and wine cellars and mills were built. Old longhouses, stables and barns were adapted and reused, and sometimes made symmetrical and given a central gable. Ida's Valley, which had three farmsteads by 1682, is an example of the patterns and processes of colonial adaptation and development. Ida's Valley, Rustenburg and Schoongezicht are justifiably celebrated as superb examples of their type and period. Dwellings and farmsteads of the 19th and 20th centuries (Schoongezicht cottage, Glenbawn, Glenelly, Kelsey, and the cluster of smallholdings known as the 'Wedges') reflect ongoing changes in agricultural practice.

Many Drakenstein farmers had large families, and schools are known to have existed on the farms, such as La Motte in 1781, and Le Plesis Marl of Jacob Marais (who had 14 children) in 1787. In the deceased estate inventories (that include Coelenhof, Welgelegen and La Motte) school rooms are listed next to the coach house, slave quarters or barn and seem to have doubled-up as the teacher's accommodation. He was often a young single man and paid much the same as a knegt (foreman, overseer). Farms of this period had family graveyards. Most of the wine cellars in the region still standing today were built during the last decades of the eighteenth century and the first three decades of the nineteenth century.

Oaks were planted in their thousands by the VOC as the few indigenous forests were felled. An oak was often planted to mark a corner boundary. Besides being planted out in big groups, they were used to form avenues and geometrical planting patterns around the farmsteads (figure B). They were often planted symmetrically around the central feature of the complex, the entrance to the main dwelling house. Oaks were planted as close as one metre apart on either side of water furrows and streams to provide shade for the precious water that was used in flood irrigation systems. The grey poplar was also introduced by the VOC and settlers planted it along the rivers and streams and wherever there was a damp patch of ground. It was a valuable source of timber for roof construction. Rafters and beams in many historic buildings are of poplar because of its lightness. Spanish reed is also still used in thatch roof construction and was introduced by the VOC. The stone pine was also introduced by the VOC in the first years at the Cape and was widely planted to provide firewood from windfalls and for nuts, used in Cape cuisine. They were used extensively in avenue and roadside plantings and to provide a shade canopy for farmsteads. Lombardy poplars were used as windbreaks after WWII, and London planes, black alder and beefwood trees were planted extensively from the 1970s as windbreaks and avenues. The camphor tree is a magnificent evergreen shade and ornamental tree from Southeast Asia. It therefore has a strong association with the VOC and with the descendants of people brought to the Cape from areas where it grows. The flowering gum and Jacaranda are ornamental trees for gardens and avenues. The cluster pine originates from France and the Iberian Peninsula and was seen by the VOC as a potentially valuable source of timber for ship's masts. Its dominance of the Cape landscape only began at the end of the 19th century as a source of wood for the production of fruit boxes and wood wool. The black wattle was introduced for the tanning industry. The tall Monterey pine was extensively used for commercial plantations but is being replaced by beefwood and poplars. Governor Sir Lowry Cole introduced the Tasmanian blue gum to Cape as early as 1836. Because of their size a number of them have become landmarks. The trees at the Groot Drakenstein station are a good example. From the 1890s when fruit farming supplanted viticulture, apiarists planted blocks of sugar gums. They were also used for avenue planting and as a windbreak tree.



Figure B: Oak Avenue at Reyneke

2.4 Emancipation and beyond

The banning of the British slave trade in 1808, shortly after Britain took possession of the Colony for the second time, delivered a big shock to slavery at the Cape. It coincided with a boom in the wine industry. Large numbers of slaves were sold from Cape Town to the countryside. When the boom ended with a suspension of preferential duties on Cape wines in 1825, the rural slave economy was effectively bankrupted. After slavery was abolished in 1834 and slaves were emancipated in 1838, large numbers deserted their former owners. Many resettled in farm villages or in mission settlements that had accommodated Khoesan descendant and free-black communities. Other places were newly established, such as Pniël, which traces its history back to 1843 when two local farmers, Pieter Isaac de Villiers and Paul Retief, donated land to the recently freed slaves of the Groot Drakenstein area with the intention that they should use it to build a self-supporting mission station. Raithby was originally a missionary community for emancipated slaves established by Barnabas Shaw following the abolition of slavery at the Cape in 1834. Shaw used a donation of one hundred pounds made by a Mrs Brackenbury of Raithby Hall in Yorkshire to buy three morgen of ground and

a house for the mission station which resulted in the name, Raithby. The church was built in 1861. The land was subsequently rented to about 800 freed slaves so that they could work on the surrounding farms and use their spare time to cultivate their own plots. Many of the descendants of the freed slaves still occupy the Raithby cottages.

Most ex-slaves, however, remained tied to farm and domestic labour. However, accommodation on farms and in villages was increasingly segregated and physically separated. In the 18th and early 19th century, housing for slaves was usually provided in buildings that formed part of the farm werf. After emancipation, housing for farm workers was often provided in isolated or small groups of cottages, usually surrounded by trees. A tangible consequence of Emancipation was that two entirely new forms of settlement occurred at the Cape, the mission village and the cottages cluster (usually linear in form). Landowners who wished to be free of reliance on workers from Pniël built their own groups of cottages to house ex-slave farm workers and their families. Women often did domestic work at the houses of the landowners. The linear layout (figure C) of these groups of cottages became a distinctive and characteristic settlement pattern throughout the Western Cape. They were generally sited some distance away from the werf along the edge of a farm track often shaded by oaks and with a water supply from a furrow for their small garden plots. The typical cottage of the mid-19th century was in the Cape vernacular; a narrow two bay house with a large projecting hearth and chimney at one end, under a thatch roof.



Figure C: The Firs Cottages

Convict / prison labour has a particularly debatable history in South Africa. Historically, South Africa operated on the understanding that prisons were places of punishment which was mainly executed through forced prison labour. The exploitation of convict labour at the Cape during the Colonial era is closely connected with the work of John Montagu, Colonial Secretary for the Cape 1843-53, and the development of road infrastructure by Mitchell and Bain. By the late 1800s, the idea of imprisonment shifted with the aim to rehabilitate prisoners. Central to this concept was the idea that rehabilitation could be usefully achieved through the labour of prisoners. This was often supported by an ideology that labour was a means of introducing 'civilisation' to Africans. With the abolition of slavery in 1834, convicts played a crucial role in providing much needed cheap labour. The enforcement of laws regulating the movement of indigenous people later provided sufficient prisoners to contribute to the labour demand. The farmers paid the government a certain amount per convict. The farmers also built prison outstations on their farms where the prisoners were housed and fed.

The surveys of 1860-90 show the few outspans and doordrifts (drovers' routes) that still survived after the big disposal of Crown land earlier in the 19th century. State land was further privatised at the end of the century. The outspan at Franschoek remained intact until 1897 when a substantial portion was subdivided and sold. Outspans were for travellers and drovers on the roads. The ox wagons travelled at between four and six kilometres per hour on the level. The traveller needed regular outspans with shade, water and grazing. These were usually provided 10 to 15 km apart. In the early 19th century the faster horse-drawn carts and coaches started to replace the ox wagons and saddle horses. There was a call for better roads and a lesser demand for outspans. Outspans and commonage also accommodated animals in towns and villages, for example on market days or for churchgoers. Livestock were seasonally driven from Franschoek, via Paarl, to the West Coast and back. 'Berg Rivers Hoek' had been used by the inhabitants of Franschoek since at least 1694 for the grazing of their cattle. Grazing on the coastal plains played an essential part in maintaining the health of the herd as the interior pastures of Franschoek were deficient in certain nutrients during the winter months. The practice continued into the twentieth century. Herding practices and pastures were substantially transformed with the introduction of wire fencing and fenced paddocks, and fewer herdsmen were needed to watch the animals.

Historically, commonage provided a place for town residents to keep their transport animals, milk cows, animals for slaughter and butcher's stock. Stock being moved between grazing lands could depasture on the commonage. Access to commonage, free-flowing water and natural

mountain slopes were held as extremely significant rights by Cape communities. It was on the commonage where old traditions were (and are) performed, family and communal gatherings take place, and freedom and solace may be found.

Burials also took place beyond the boundaries of farms. Initiation sites are another category of heritage resource that requires privacy and solitude. As many of these places have been kept secret from property-owners and authorities, they are extremely vulnerable to accidental damage or destruction. One of the central issues for negotiated agreement between the Dwars River farm owners and the local communities, was that of public access across property boundaries to these resources and onto old commonage.

2.5 Railways

There are several railway stations within the study area along the Cape Town to Paarl line, such as Lynedoch, Vloottenburg, Stellenbosch, Du Toit, Koelenhof, Muldersvlei and Klapmuts. The railway line from Paarl to Franschoek came in 1904. Refrigeration cars on trains were set aside by the Railway Department for the conveyancing of fruit for export and for sending fruit upcountry. Station buildings and houses were built by the railways for employees. In the early 1930s the train from Paarl to Franschoek stayed overnight at Franschoek before undertaking its return journey. The Simondium-Franschoek line is currently disused and is in bad condition. However, we have been advised that it is being put into use again for tourism trams.

2.6 Developments in farming

During the 18th and 19th centuries, the region was well known for its mixed farming; grain fields, grazing lands and vineyards but with an increasing emphasis on wine production. Up until about the 1860s wine was one of the most important sources of income for the Cape Colony and the Drakenstein became a major wine production area. In the late 19th century the wine industry at the Cape collapsed as a result of Phylloxera. By the 1890s, 80% of the vineyards of Drakenstein had been destroyed despite all sorts of attempts to control the disease. It was only later that the 'winelands' returned, and under centralised control. KWV estimated that a total of 12 500 hectares of vineyards in 1900 had become 95 000 in 1937, and most wine was exported to Britain.

After the Phylloxera disaster, the Drakenstein Valley was chosen as a viable area for a demonstration project for a scheme introduced by C.J. Rhodes to develop the deciduous fruit export industry. Under the instruction of Rhodes, 29 farms were bought out in the valley and in 1902 were consolidated under Rhodes Fruit Farms (RFF), which from the 1960s until recently was owned by Anglo American Farms. The historic homesteads such as Boschendal, Good Hope and Rhone became RFF managerial residences. The powerful institutional memory associated with RFF is very much evident in the landscape in terms of its settlement and farming patterns, architecture, social institutions and labour economy. They created wind-protected orchards of plums, pears, citrus, apricots and peaches screened by windbreaks of pines and gums. They planted blocks and avenues of eucalyptus to provide nectar for bees and they erected new buildings to process the produce and to house their staff. In the late 20th century the farms produced greatly reduced quantities of pears and plums while the production of wine has been substantially expanded. Areas that have traditionally been used for fruit farming are now under vines.

The institution associated with Rhodes Fruit Farms lasted more than a century (c.1890-1990). It led to a number of significant changes: improvements to the road and railway network; the restoration/rebuilding of a number of historical farm werfs, most notably the work designed by Sir Herbert Baker; an increased demand for farm labour and the building of labourers' villages such as Lanquedoc and Kylemore; the establishment of pine forests; an increase in cultivation from vineyards to orchards; the development of a range of agro-commercial activities, such as a saw-mill and fruit cannery; and the establishment of a number of social institutions to serve a newly emerging community, such as St Georges Anglican Church (c 1906) and the Drakenstein Games Club. These elements include the formalised road system, leiwater or sluice and dams. The early forestry initiatives near Franschoek answered the needs for packaging material for this expanding industry. Men and boys were recruited from distant mission villages such as Wupperthal in the Cederberg to work in the Drakenstein area.

The village of Lanquedoc (1902) was designed by Baker and is highly representative of a planned labourers' village influenced by the Arts and Crafts Movement and the concept of the 'garden village' (figure D). In 1902 James Rattray and Rhenish missionary Jacob Weber acquired a portion of the Blaauwklippen farm outside Stellenbosch. The land was divided into plots and sold to 'Coloured' families, and most of the associated debt was paid off within twenty years. It is named Jamestown after Rattray but was also

known as Webersvallei. Despite Weber's role in the establishment of Jamestown, it is not a mission station per se.



Figure D: Lanquedoc

After WW2, commercial enterprises and commercial farming transformed land use and saw the demise of traditional Cape colonial family network farming practices. Mechanisation resulted in a decline in the attachment of the farmer to his land, his workers, his animals and their communal co-existence. New linkages were established between the new class of commercial farmers and the growing stratum of intellectuals that Victoria College in Stellenbosch was producing. Driving livestock from Franschoek to seasonal pastures on the West Coast came to an end. The old pastures, on the middle mountain slopes, were replaced with forestry. Agricultural Boards supported White farmers and regulated production and markets. KWV (1918) and SFW (1935) centralised wine-making and exports and SAD (1938) did the same for dried fruit. Several Co-Operative cellars were formed in the 1940s.

The extensive building and development after WW2 escorted South African wine cellaring into a new era: cold fermentation, better pumps, and monumental vaults of wines and brandies. In 1971, the first South African wine route was opened in Stellenbosch, the brainchild of Frans Malan of the Simonsig Estate and Niel Joubert of Spier. Dairy farming was consolidated

into mega-businesses, vineyards and wineries replaced grain crops and orchards, and market gardens were usurped by infill suburban or social housing. A Cape wine estate became a prestigious investment (also for tax relief) for local and overseas magnates, and big injections of capital were necessary to sustain agriculture and the rural economy. Buildings and infrastructure were replaced and modernised and properties were subdivided. Small-scale fruit and vegetable traders continued their operations in and around the villages during the 1950s before being restrained by apartheid laws and other obstacles.

2.7 Forestry

A huge demand for timber resulted from the discovery of diamonds and gold in the north, for railway sleepers, mines and buildings. The Cape Colonial Government appointed Joseph Storr-Lister as Superintendent of Plantations in 1875. The first commercial plantations were laid out in 1876. Government nurseries and forestry stations were established and vast tracts of Crown and municipal land were planted with eucalyptus and pines. Fynbos-covered mountain slopes and land considered being of marginal agricultural value was turned into plantations. Farmers were encouraged to establish private plantations. The practice at the turn of the century was to sow the seeds of the cluster pine on the mountain slopes. An unexpected consequence of the afforestation programme was the rapid invasion of the mountainsides by pines and gums. The windborne seeds of the cluster pine and the gums carried by the summer south-easters rapidly invaded the fynbos-covered upper slopes of the Simonsberg and Drakenstein mountains and today enormous energy has to be invested in eradicating them. Other alien trees were also introduced as a source of tannin for the leather industry and to stabilise sandy areas. These too have become invasive, notably various acacias and hakeas. As early as 1903 parts of the farm Driefontein formed part of a forestry reserve known as the Franschhoek Plantation.

After WW1 the Government of the Union of South Africa started buying up insolvent farms and redeveloping them as plantations. In 1917 the South African government initiated a job-creation policy in the Franschhoek Valley that resulted in a forestry industry in the La Motte and Wemmershoek region as well as at Robertsvlei and later Maasdorp in the 1960s. Complete with housing settlements and sawmills (figure E), these forestry stations became settled with small communities of people, who still remember what life was like on those stations at the time.



Figure E: Wemmershoek Sawmill

The remains of the Driefontein village, an early 20th century forester's settlement near Robertsvlei, were remarkably well preserved. The village represents a discrete cultural episode associated with a move from agriculture to large scale State forestry development, prompted by the changing economic climate at the Cape after the Great War of 1914. In 1944, the South African All Bound Box Company, established in Parow in 1937, opened a factory in Stellenbosch with the intention of capitalising on the growing demand for fruit boxes in the Stellenbosch region. Before it could complete its factory, the company was bought by Anglo American and renamed General Box Company.

2.8 Educational and cultural institutions including the University

Rhenish Girls High, established in 1860, was the first girls' school in the country and lessons were given in German and English. Bloemhof Girls High, a prominent Afrikaans girls' school, was established in 1874. A gymnasium, known as Het Stellenbossche Gymnasium, was established in 1866. In 1874 some higher classes became Victoria College and then in 1918 the University of Stellenbosch. The Elsenburg Agricultural Training Institute was established in 1898 as the first agricultural college of its kind in South Africa. There was an

influx of students together with staff and service providers to serve the new institutions. Lückhoff High School was established in 1935, as the first secondary school for Stellenbosch town's Coloured population. Secondary education for Coloured people in South Africa started receiving attention in 1919 with the primary objective of training more Coloured teachers. Pupils came from Stellenbosch and the surrounding communities of Vlottenburg, Jamestown, Pniel and Kylemore and later from as far away as Bredasdorp, De Aar, Malmesbury, Worcester and even South West Africa (Namibia). In 1969 Lückhoff High School was officially relocated to Ida's Valley after Die Vlakte was proclaimed a White residential area in 1964. The building was incorporated into the University and now houses organisations serving the broader community.

Demographic changes and the physical growth of Stellenbosch are associated with the expansion of the University during the 20th century. It was formally enacted in 1918 with financial backing from Jan Marais of Coetzenberg. The University's educational and social experience is closely associated with being a largely residential University with strong cultural roots and traditions. A sense of place was created by adapting similar scaled and sized buildings for different uses. Spacious Victorian and Edwardian villas accommodated senior lecturers and managers.

A rapid rise in the population after WW2 demanded a new type of accommodation and this led to expanded suburbs, demolitions and redevelopment of old properties, and the erection of many blocks of flats. The founding of Historic Homes of SA by Anton Rupert saw the restoration and sustainable reuse of several endangered buildings. By 1970 HH owned 22 properties in Stellenbosch alone. In the 21st century, it has been recognised that the relationship between new contemporary and old historic properties on the University campus has to be carefully balanced, and restitutorial projects are addressing the University's practices during the apartheid period.

2.9 Apartheid, town expansions and suburbanisation

By the turn of the 20th century, townships were being extruded on the margins of towns, particularly Stellenbosch and Franschhoek. Hans Heese explained that: "In South Africa a society emerged after 1948 which emphasized, race, culture and ancestry, and where the white population enjoyed political advantage. To prevent any confusion about who was 'white' and who was 'non-white', laws were enacted to prohibit physical contact between whites and other groups". After the National Party government came to power in 1948, several apartheid laws were passed in

quick succession including the Population Registration Act and the Group Areas Act of 1950. The places ('townships' or 'locations') that were declared Coloured or Native Areas in the Stellenbosch district included Franschhoek North (Groendal), Cloeteville, Ida's Valley, Pniel and Kaya Mandi. Migration from farms also began to build up during the 1970s.

By 1880 the town of Roubaix Dorp [Franschhoek] was relatively integrated with descendants of European settlers, slaves and KhoeSan as well as indentured migrants living there. Some were property owners and some were tenants, some lived on the nearby farms. Le Roux Dorp was declared a Coloured Group Area in 1958 and by 1971 the Whites were moved out, 'South African' Africans were sent to Mbekweni location and Coloureds and 'other' Africans shared Groendal. Sixty Coloured families were removed from 'White' Franschhoek. "Die Vlakte (Die Dorp) [Stellenbosch] was proclaimed a White Group Area in 1964 and 3700 people classified as 'Coloured' were removed. Six schools, four churches, one mosque, one cinema and ten businesses were affected" (Die Vlakte Project). Many families moved to Ida's Valley. In Cloeteville people had to literally build a community from the ground up. Any social integration there may have once been between Stellenbosch people was damaged forever.



Figure F: Kaya Mandi Hostel Types.

Kaya Mandi was founded in 1941 to house exclusively black migrant male labourers employed on the farms in the Stellenbosch area. It was originally designed to alleviate the overcrowding specifically associated with the individuals residing in the Du Toit section of Stellenbosch. Additionally, it was to house black Africans who resided elsewhere within the Stellenbosch municipal area. This principally meant people living in Ida's Valley and Jamestown as well as on the farms spread throughout Stellenbosch. In 1966, the nine largest employers in the Stellenbosch district, including Stellenbosch University, the town administration, several vineyards and a fruit packing company, united to erect 38 ready-made homes, so-called hostels (figure F). Overall Kaya Mandi is a microcosm of township life in the Western Cape.

Foreign investment companies have acquired wine farms in the Western Cape in the 21st century, for example Leeu Estates, Val de Vie, Mont Rochelle and Lanzerac. Tourism and events venues have started to overtake agricultural production as the major sustainable economic base in the area: farms are being used for their aesthetic and recreational properties and production is no longer the main function. Over-scaled private dwellings are also being built in picturesque spots and on promontories, ridges and skylines in order to capture sweeping views, such as Jonkershoek and on the Bottelary. However, the selling points of these properties are directly associated with the attractions of the rural landscapes, farms and villages that served the farms. The qualities of these attractions are being further eroded by urban sprawl, some of which is the result of up-country middle class influx into gated communities, and some of which is to absorb property-less people seeking a better life in the Western Cape.

Meanwhile, farm workers are relocated off the farms and their homes have been demolished or converted to guest cottages. A heritage practitioner warned that if farm-workers are accommodated within 'agri-villages', it is probable that workers' houses on many farms in the area will become vacant or illegally occupied. She recommended that "every effort should be made to encourage the adaptive reuse of these houses in order to conserve them". However, the unintended consequence is that the social and historical integrity of what and who they represent is compromised and authenticity and meaning is lost.

2.10 Into the future

The 1935-2010 map sequence (figures 6 to 10) really brings home the massive changes that have occurred in the subject landscapes over the last 80 years. Unless quite different policies are put in place as a matter of urgency, the implications are that significant loss of agricultural land will continue, along with further substantial low-density suburbanization of the remaining rural areas (figure G). This would result in increasing logjams in the overall vehicular mobility network, as well as negative outcomes for tourism, the local economies and the affected landscapes.

Surely it would be more sensible to conceptualize a restructured, generally higher density, more compact, truly urban settlement system connected by effective public transport, with the retention of as much rural and wilderness land as possible?

Also, is it not time that Stellenbosch, with its 'Innovative Agenda', promotes more integrated urban communities across the spectrum of South African society, rather than perpetuating race- and class-defined gated suburbs?



Figure G: Intrusive development on agricultural land

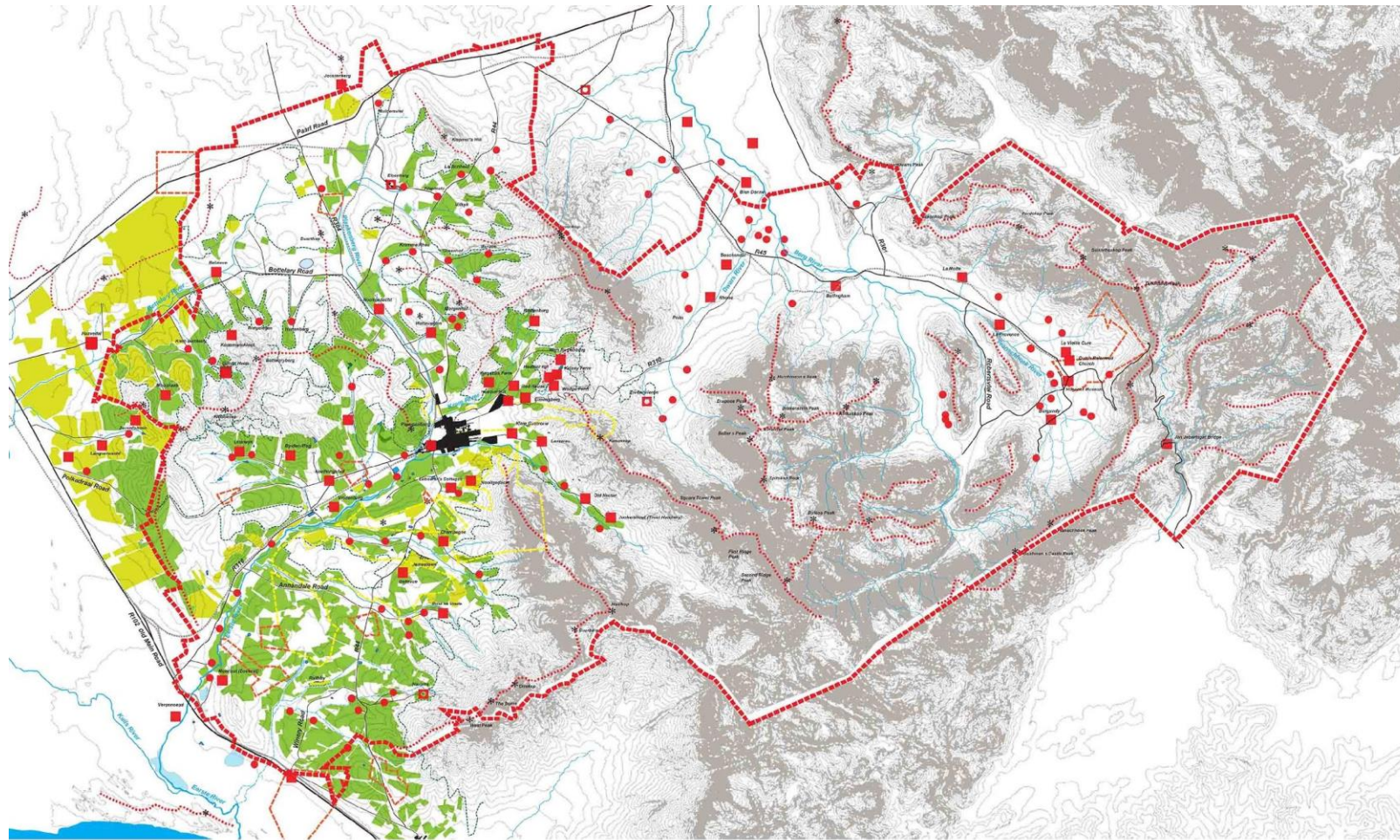
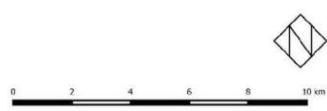


Figure 4.3



- Legend**
- Stellenbosch Municipality
 - ⬤ Crestlines & Peaks
 - ⬤ Edge of Farmland/Wilderness
 - Vineyards and Orchards
 - Field crops, Pasture
 - Forestry
 - Recreation
 - Urban, Suburban, Peri-Urban
 - Conservancy Areas
 - Rivers & Dams
 - Roads
 - Railway Lines
 - Historic Commonage
 - Historic Outspans
 - Heritage Sites/Homesteads
 - PHS Sites/Homesteads

DEVELOPMENT OF THE CULTURAL LANDSCAPE: 1935 - 1941

Note: No Topocadastral data was available for Franschhoek during this time sequence.

Figure 5: Development of the Cultural Landscape 1935 - 1941

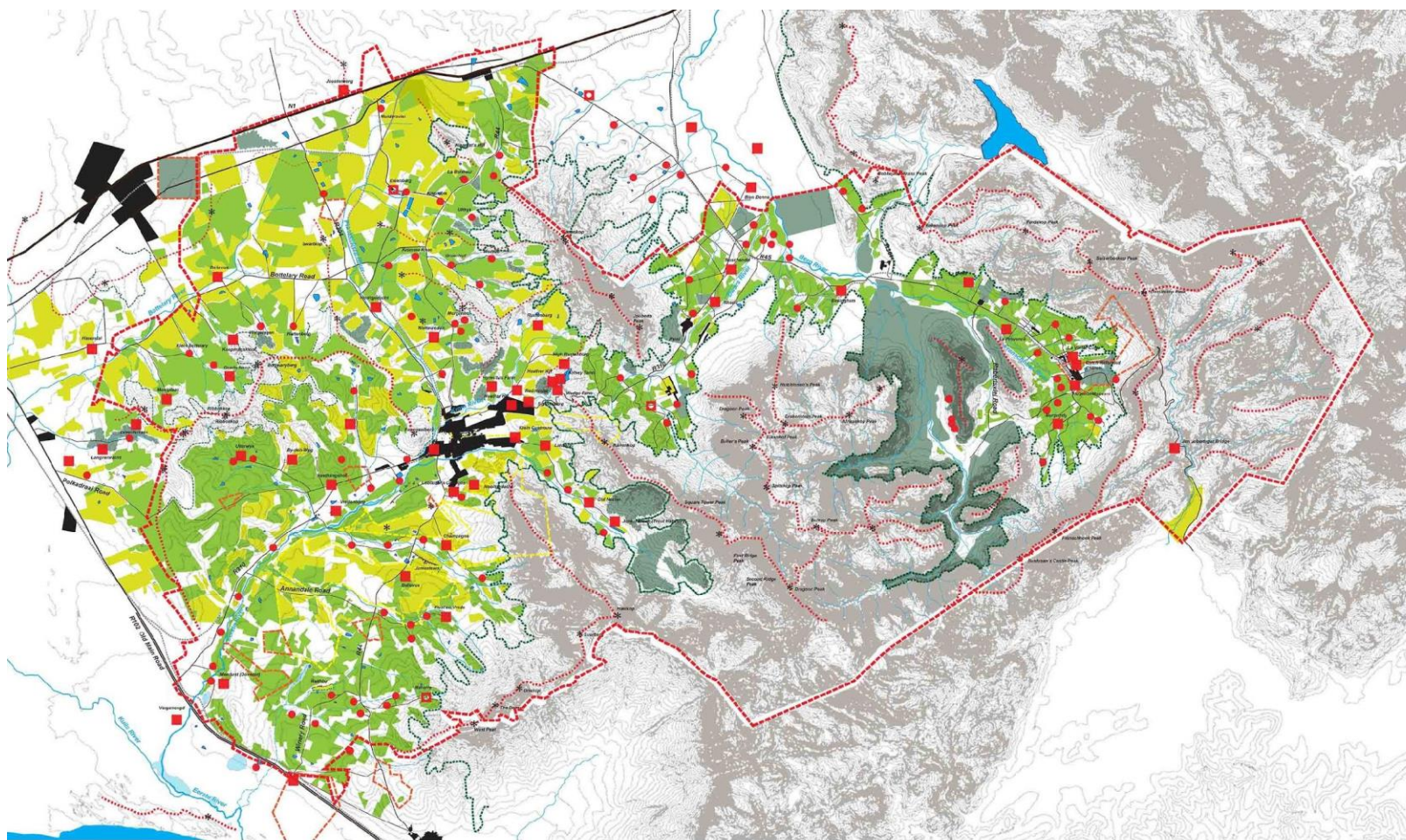


Figure 4.4



- Legend**
- Stellenbosch Municipality
 - Crestlines & Peaks
 - Edge of Farmland/Wilderness
 - Vineyards and Orchards
 - Field crops, Pasture
 - Forestry
 - Recreation
 - Urban, Suburban, Peri-Urban
 - Conservancy Areas
 - Rivers & Dams
 - Roads
 - Railway Lines
 - Historic Commonage
 - Historic Outspans
 - Heritage Sites/Homesteads
 - PHS Sites/Homesteads

DEVELOPMENT OF THE CULTURAL LANDSCAPE: 1958 - 1962

Figure 6: Development of the Cultural Landscape 1958 - 1962

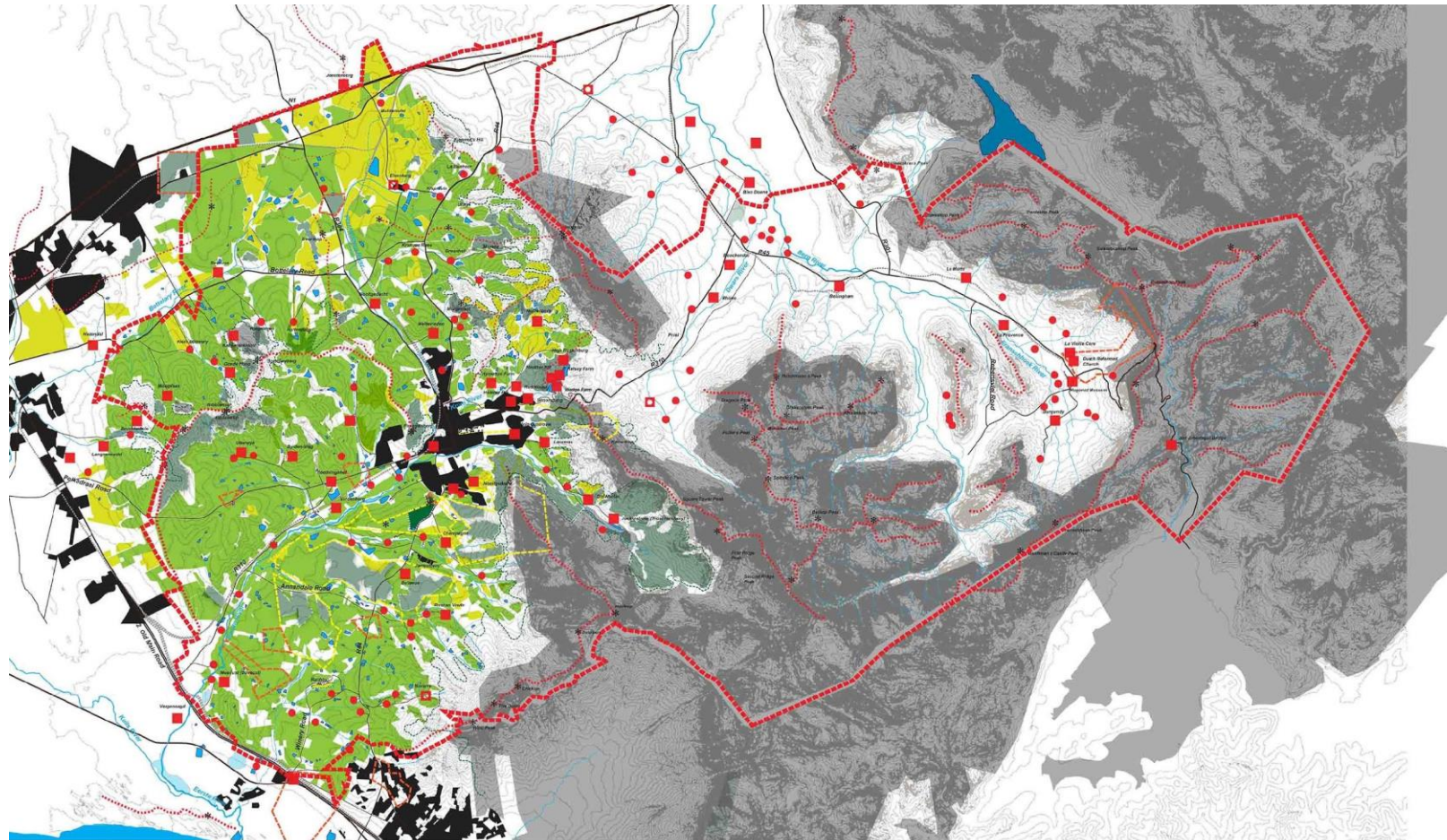


Figure 4.5



DEVELOPMENT OF THE CULTURAL LANDSCAPE: 1979 - 1983

Note: No Topocadastral data was available for Franschhoek during this time sequence.

- Legend**
- Stellenbosch Municipality
 - Crestlines & Peaks
 - Edge of Farmland/Wilderness
 - Vineyards and Orchards
 - Field crops, Pasture
 - Forestry
 - Recreation
 - Urban, Suburban, Peri-Urban
 - Conservancy Areas
 - Rivers & Dams
 - Roads
 - Railway Lines
 - Historic Commonage
 - Historic Outspans
 - Heritage Sites/Homesteads
 - PHS Sites/Homesteads

Figure 7: Development of the Cultural Landscape 1979 - 1983

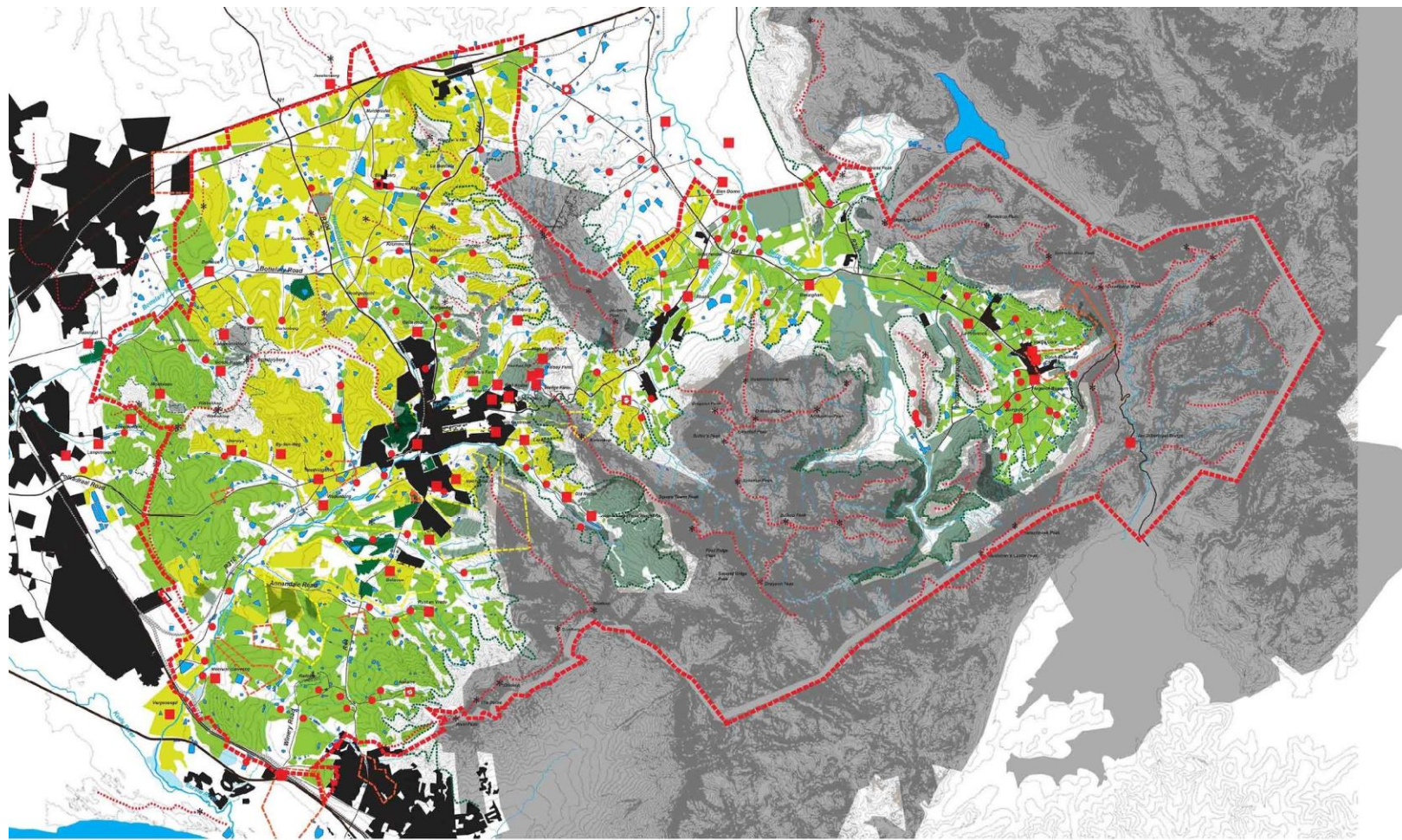


Figure 4.6



DEVELOPMENT OF THE CULTURAL LANDSCAPE: 2000

- Legend**
- Stellenbosch Municipality
 - ✱ Crestlines & Peaks
 - ⬜ Edge of Farmland/Wilderness
 - Vineyards and Orchards
 - Field crops, Pasture
 - Forestry
 - Recreation
 - Urban, Suburban, Peri-Urban
 - Conservancy Areas
 - Rivers & Dams
 - Roads
 - Railway Lines
 - Historic Commonage
 - Historic Outspans
 - Heritage Sites/Homesteads
 - PHS Sites/Homesteads

Figure 8: Development of the Cultural Landscape 1935 - 1941

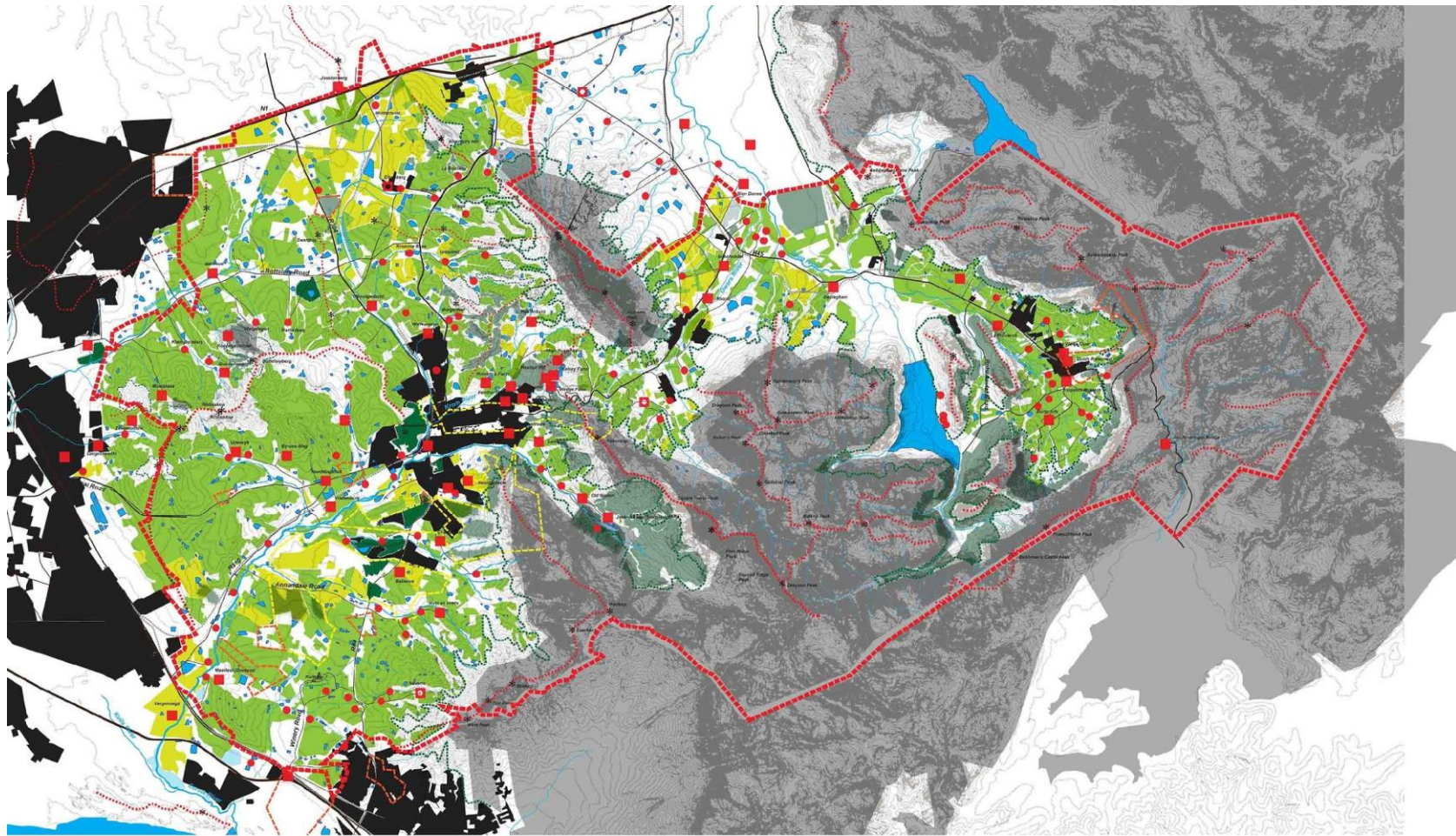


Figure 4.7



DEVELOPMENT OF THE CULTURAL LANDSCAPE: 2010

- Legend**
- Stellenbosch Municipality
 - ⋆ Crestlines & Peaks
 - ⋯ Edge of Farmland/Wilderness
 - Vineyards and Orchards
 - Field crops, Pasture
 - Forestry
 - Recreation
 - Urban, Suburban, Peri-Urban
 - Conservancy Areas
 - Rivers & Dams
 - Roads
 - Railway Lines
 - Historic Commonage
 - Historic Outspans
 - Heritage Sites/Homesteads
 - PHS Sites/Homesteads

Figure 9. Development of the Cultural Landscape 2010

3 THE METHOD

For most of the last century the dominant international heritage conservation approaches tended to focus on starkly defined and catalogued 'monuments'. Moreover, they were characterised by a complete divide between considerations of 'natural' and 'cultural' phenomena. Over the past three decades, however, more appropriate and inclusive approaches have developed. Consequently, there has been a shift in focus from individual 'building-objects' and sites, to areas or even to entire landscapes.

As discussed in the Phase 2a Report, the 'canvas' that spatially defines the subject of our study has been substantially expanded. The appropriate methods employed to identify, assess, and document the significance of such multi-faceted and diverse tangible heritage should be inclusive and occur at a number of scales. Best international practice spans 'natural' and 'cultural' dimensions and recognises the dynamic quality of so-called natural landscapes and settled townscapes. Furthermore, in an increasingly homogenised world, unique cultural sites and landscapes contribute to national, provincial and local identity and to the economy.

Our approach recognises that the heritage inventory should identify areas (top-down) as well as specific heritage sites (bottom-up). Extensive landscapes predominate in wilderness and rural domains, and these are analysed and understood in terms of their specific constituent geology, landform, soils, biodiversity, hydrology, vegetation, use and so on. In the urban context such 'natural' attributes are present in an underlying way, and in this context settlement patterns, land use, specific building styles and cultural / historical associations all combine and give rise to townscapes and individual sites of heritage significance. Both landscapes and townscapes may have distinctive character and 'sense of place'.

The Phase 2a Report included a map sequence delineating the historical development of settlement, routes and other cultural adaptations in the study area, a socio-cultural timeline (Appendix 1 to the Phase 2a report) and a narrative spanning archaeological and early historical periods (Appendix 2 to the Phase 2a report). The narrative has been revised and expanded into *Phase 3: An Archaeological, Archival, Oral and Spatial History* and is here included as Appendix 1.

Within and beyond this broad methodological framework and previous findings, Phase 2b and Phase 3 work has included:

- further refinement of method, analysis and assessment relative to the wilderness and rural landscapes, and inclusive of scenic routes, as applicable to the heritage inventory; and
- identification of existing cultural sites in both landscape (wilderness and rural domains and settings) and urban or townscape settings.

The respective detailed methods are further discussed under the following sub-headings: 3.1 Landscape Character Assessment; 3.2 Scenic Routes Identification and Assessment; 3.3 Townscape Character Defining Process; and 3.4 Heritage Sites Identification and Assessment.

Please see the infographic (figure 26) below for a visual representation of the process followed to develop the inventory.

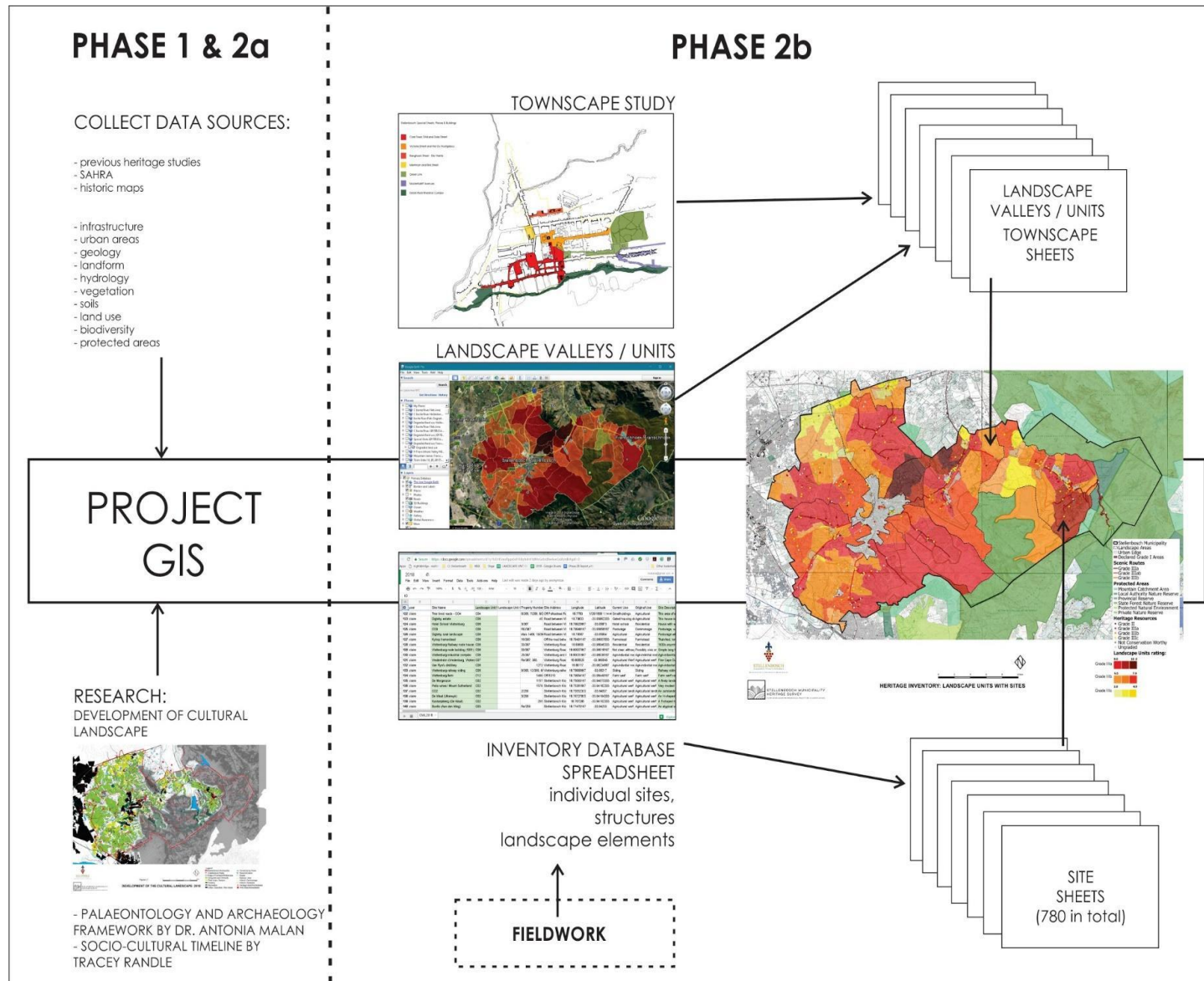


Figure 10: Graphic representation of the process followed to develop the inventory.

3.1 LANDSCAPE CHARACTER ASSESSMENT

Landscape character assessment¹⁰ is a tool for understanding the formation of the landscape and how it may change in the future.¹¹ Such assessment can increase appreciation of what makes the landscapes distinctive and what is important; it helps us understand the cultural layering within the landscapes and leads to contributions to heritage inventories by the identification of areas of significance. The Landscape Character Assessment Guidance for England and Scotland (Swanwick 2002) was used as one of a whole range of case studies, supporting the basic terminology used in this document¹².

The process of landscape character assessment consists of identification and mapping in a cascade from the large to smaller scales. It distinguishes between (and cascades from) landscape types, through major valleys and sub-areas within the major valleys, to smaller areas termed landscape character units (Swanwick 2002: 9). In the process, composite maps are produced that describe character and its underpinnings or key characteristics. These key characteristics, together with associated acceptable levels of change, will inform the Conservation Management Plan for the study area (Phase 4 of the project). Special features and degraded areas form an integral part of the analysis of landscape character units within the study area.

The study area is complex and comprises many components. As landscape features (both natural and built) in themselves may possess significance, thorough analysis had to be undertaken as part of the overall evaluation process. Thus, heritage significance assessments may contain an appraisal of individual components as well as evaluation of the overall landscapes. The significance of the landscape reflects not just the sum of the individual parts, but rather landscape as an integral whole. It is the nature of the relationship between features, and between these features and the broader landscape setting (context), that is important.

3.1.1 THE PROCESS OF LANDSCAPE CHARACTER ASSESSMENT

While we have followed the essence of the internationally acclaimed Burra Charter, we have augmented its methodology by

incorporating elements of the so-called Historic Urban Landscape approach (HUL) because of its reference to dynamic systems in contrast to static historical entities. The diagram below is a summary of the detailed methodology discussed in the Phase 2a Report, indicating where Landscape Character Assessment fits into the process.

Table 1: Summary of Method

Mapping		
A Documentary	B Oral	C Physical
Historical Spatial Framework (Antonia Malan)	Public engagement and stories (Shawn Johnson)	Landscape Character Assessment
Socio-cultural timeline (Tracey Randle)	Heritage Inventory digital online survey, relating to associations with places by members of the public	Recording of significant heritage features in the field
GIS datasets, including natural basemap layers (CTS)		

- Assessment of significance (value within a landscape)
- Statement of significance
- Assessment of vulnerability for future use
- Integration into framework

Phase 2a presented the process of identifying, describing, and mapping Natural layers within the broader study area. Landscape Character Valleys within the Stellenbosch Municipal boundary were derived from a desk-based review and analysis of existing information, including published material and digital datasets. Landscape Character relates to natural factors:

- Geology and soils;
- Topography, elevation, and slope;
- Hydrology, including drainage, rivers, and wetlands;
- Vegetation;
- Protected Areas;

¹⁰ Landscape character assessment (LCA) is a recognised approach to identifying character and distinctiveness through the examination of the interaction between people and their environment. LCA was developed as a technique in the 1980s, and the most recently published guidance is contained in *An Approach to Landscape Character Assessment* (Natural England 2014).

¹¹ Natural England: Swanwick 2014: 3.

¹² Historic England Historic Landscape Characterisation (2018), Northern Ireland Regional Landscape Character Assessment (2018), Atlas des paysages des Hautes-Alpes (2018),

- Biodiversity designations (such as Critical Biodiversity Areas, Ecological Support Areas, Special Areas of Conservation).

Landscape Types

The method is to use datasets and graphics (mapped and combined) to identify correspondences between, for example, land cover and topography, to see where changes in landscapes occur. The study area has three distinct Landscape Types:

- Mountains (slope steeper than 1:4) – steep, rugged, majestic - 'wilderness' character;
- Foothills (slope 1:4 to 1:10) – gently rounded form with grassy slopes – 'parkland' character;
- Valleys (slope less than 1:10) – fertile agricultural landscape – 'rural' character.

Landscape Character Valleys

The Stellenbosch Municipal area comprises several distinct spatially defined areas that have their own distinct identity, recognisable at a municipal scale. The team recognised ten 'valleys', separated by mountain ridges. These "valleys" can also be described as realms.

Character, however, is not limited by natural boundaries, and therefore slight adjustments resulted in the study area being divided into nine different Valleys, that differ from the natural valleys. These nine valleys are listed below:

- | | |
|---|------------------------|
| A | Krom River Valley |
| B | Bottelary Farms Valley |
| C | Eerste River Valley |
| D | Jonkershoek Valley |
| E | Ida's Valley |
| F | Dwars River Valley |
| G | Berg River Valley |
| H | Franschhoek Valley |
| I | Klapmuts Valley |

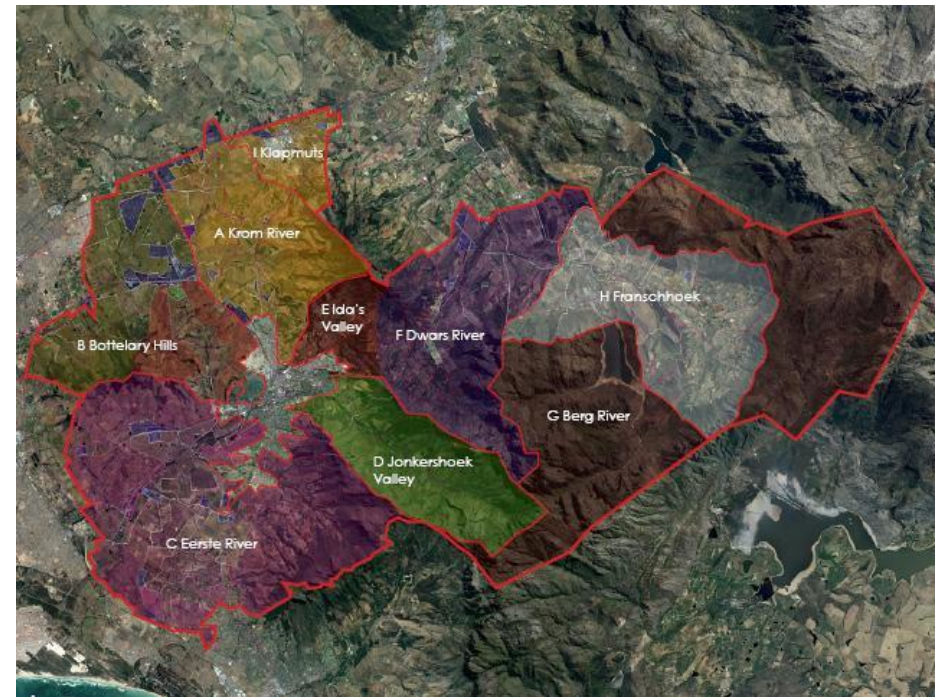


Figure 11: Nine Landscape Character Valleys within the Stellenbosch Municipal Boundary.

Landscape Character Areas to Landscape Character Units

Each Landscape Character Valley was scrutinised in even finer detail. The project GIS was used as the foundation to understand the natural, cultural, and perceived elements contained within the landscape valleys. Additional information was derived through the application of Google Earth and Cape Farm Mapper. Each Landscape Character **Valley** contains smaller Landscape Character **Areas** and these were further divided into Landscape Character **Units**. As an example, figure 13 shows the classification from Valley through Area to Units in the Eerste River Valley. The last unit shows the heritage sites recorded as part of the fieldwork and the patterns they revealed.

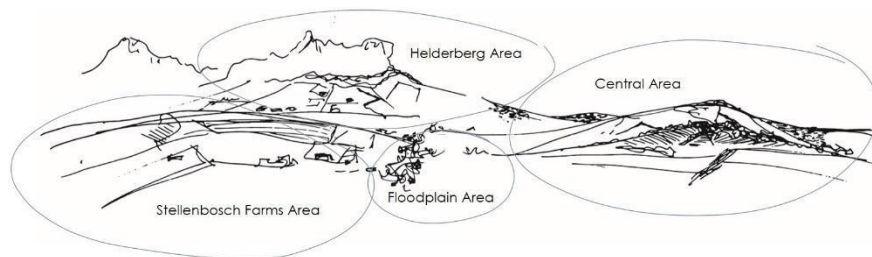


Figure 12: Eerste River Valley.

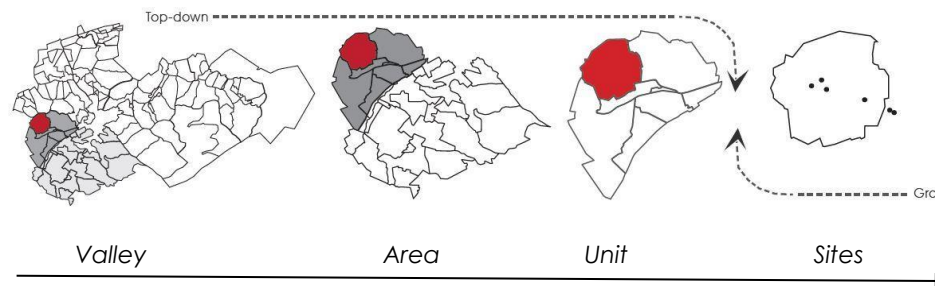


Figure 13: Cascading hierarchy of the Landscape Character study of the Eerste River Valley; Stellenbosch Farms

¹³ LCA was developed as a technique in the 1980s, and the most recently published guidance is contained in *An Approach to Landscape Character Assessment* (Natural England 2014).

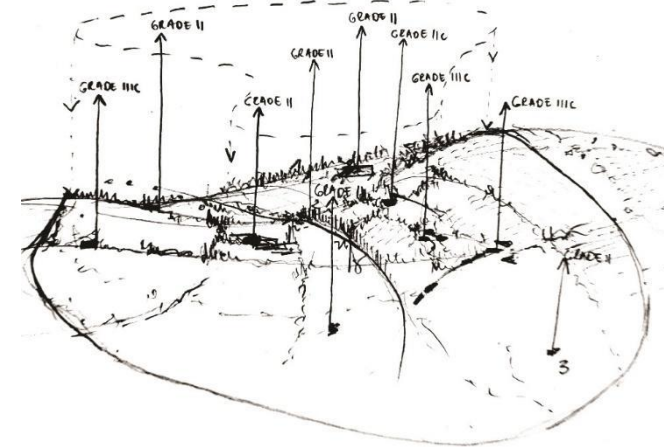


Figure 14: Typical Landscape Character Unit with identified sites to confirm boundary.

3.1.2 THE LANDSCAPE METHOD SUMMARY

Landscape Character Assessment¹³ helps us to understand our landscapes: their qualities, vulnerabilities and varying capacities to absorb change. It is a tool for understanding the formation of landscapes, defining patterns of natural and cultural features, and identifying the significant elements that give them character. Landscape Character Assessment is an integral part of identifying **Cultural Landscapes**, which embody the long history and heritage of relationships between nature and culture, between people and their environment.

There are a range of Landscapes within the boundaries of the Stellenbosch Municipality. Its wilderness and predominantly rural character is made up of different **types**¹⁴ of natural landscapes, consisting of mountain peaks and ranges, rolling hills and valleys. These landscape types are found in individual **Character Areas** that differ from one another. Character depends not only on these distinguishable landscape types but also on the functional **patterns** and land use **elements**¹⁵ that are made up of distinctive

¹⁴ Landscape Types: Generic landscapes with broadly the same characteristics (the same composition can occur somewhere else as well).

¹⁵ Landscape elements: Those individual functional components that make up a landscape.

features¹⁶ (Swanwick 2002: 34). Patterns in the rural Stellenbosch and Klein Drakenstein region are predominantly created by vineyards, irrigation dams, windbreak trees, orchards and plantations, set in particular relationships to surrounding and interleaved natural assets. Some of the distinct features include avenues, individual and clusters of trees, and historic farms with their associated buildings, often on particular alignments.

It is important to analyse the character of landscapes at various scales in order to understand each component that makes up the complex whole. The analysis of character in the landscape therefore follows the hierarchy of scale from **Valley** to **Area** and then to **Unit**¹⁷.

In each instance, 'Character' is thus understood to comprise a distinct, recognisable, describable and consistent pattern of elements in the landscape that makes one landscape different from another, each with its **sense of place**.¹⁸ When such a place is recognised as a whole and in its elements as of value to us, it is defined as having **Significance**. The purpose of Landscape Character Analysis in this study is to help preserve and manage the significant qualities of our cultural landscapes as our heritage.

Landscape Character Analysis

Landscape Character Analysis followed a two-pronged top-down (desktop) and bottom-up (fieldwork) approach:

- a) The top-down analysis included a look at the combination of landscape type, elements and distinctive features, as well as the dominant visual resource that makes up the character. The desktop analysis (maps and Excel sheet) was verified in the field through a photographic documentation of the entire study area and the plotting of boundaries (transition lines) between character units on Google Earth.
- b) The fieldwork process involved the documentation of all heritage sites (farmsteads, barns, workers cottages, grain silos, bell towers, field systems, gathering places, etc.). The verification of the condition of the landscape character unit as a visual resource formed part of the extensive fieldwork process. Each site was identified with a simple image and logged in the fieldwork application created for this project.

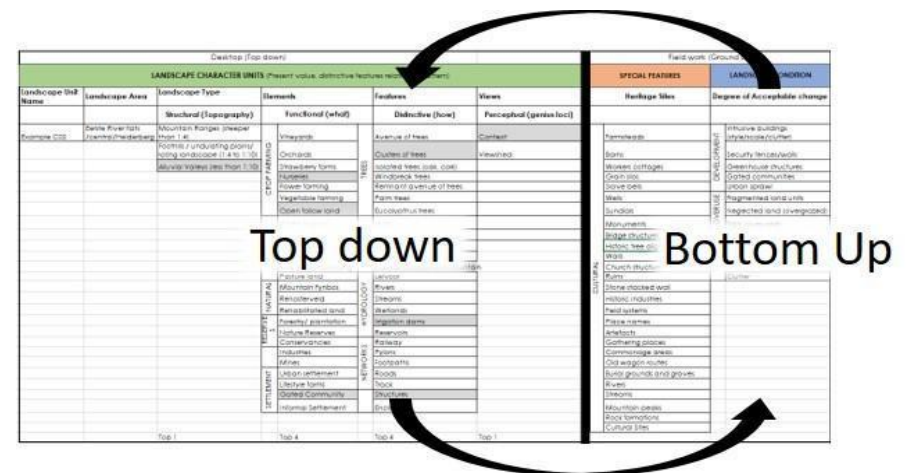


Figure 15: Top-down (desktop) and bottom-up (fieldwork)

¹⁶ Landscape features: The distinctive attribute or aspect of the functional elements within the landscape. Particularly prominent or eye-catching components.

¹⁷ The sheets developed for the Landscape Character Analysis was arranged in this format for the online Heritage Inventory .

¹⁸ Sense of place is the unique value that is allocated to a specific place or area through the cognitive experience of the user or viewer.

important the value to the specific landscape unit, the higher the weight assigned. After allocating weights to each value line, the team of decision-makers assigned a score to each option based on pairwise comparisons. The higher the score, the better the performance of the option in respect to the considered value line. Finally, the criteria weights and the options scores were combined, determining a global score for each landscape character unit. The global score for each landscape character unit is a weighted sum of the scores obtained from the application of all the criteria. Any bias in the decision-making process is reduced by being consistent during the evaluation process.

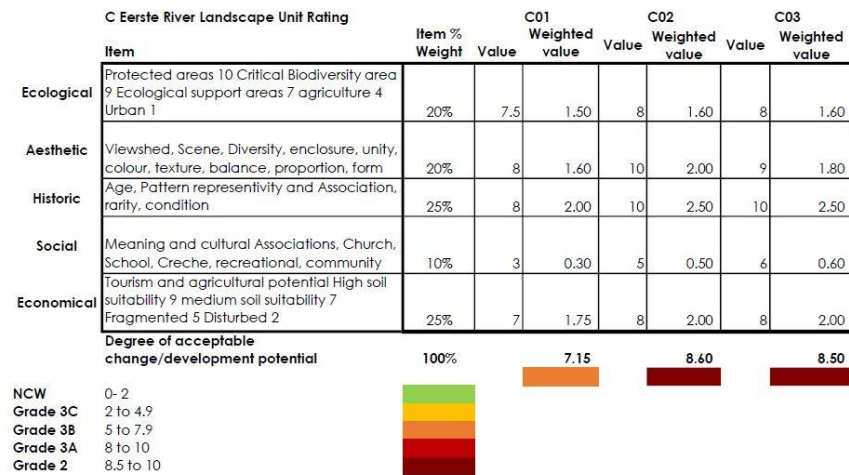


Figure 18: Analytical Hierarchy System to evaluate significance

Weighting and scoring

Figure 18 shows the weighting of each value line as per the criteria of the professional team. In the cultural landscapes of Stellenbosch, with its primary character relating to the production of wine, the economic and historic values are considered to be the highest (each weighted at 25%). The ecological and aesthetic values are each weighted at 20% after which social value is considered at 10%. The scoring of each value line per landscape character unit followed these guidelines for a score out of 10:

1. Ecological:

Depending on the degree of coverage of each landscape character unit a mark out of ten is allocated according to the following guidelines:

- Protected areas 10
- Critical biodiversity areas 9
- Ecological support area 7
- Agriculture 4
- Urban 1

2. Aesthetic:

Assigning values to visual resources is a subjective process. Researchers have found consistent levels of agreement among individuals asked to evaluate visual quality. Studies for perceptual psychology have shown a human preference for landscapes with a higher visual complexity particularly in scenes with water, rather than homogeneous areas (Young 2011). Assessing the Landscape Quality of the various landscape character units is a crucial component of the process. This process starts off with noting and mapping any elements within a landscape character unit that deviates from its defined landscape character. These could be unsympathetic or insensitive development, over-utilisation of certain elements or intrusive land uses. The aesthetic value of the landscape can be assessed by understanding the ten factors below (Swanwick 2002). In this case, the score out of ten is related to the number of factors ticked below:

- Viewshed (✓)
- Scene (✓)
- Diversity
- Enclosure (✓)
- Unity (✓)
- Colour
- Texture
- Balance and proportion (✓)
- Scale (✓)
- Form

3. Historic

The historic value of a landscape character unit is given a mark out of ten based on the inventory of sites, the presence of noteworthy settlement patterns, condition, age and associated rarity.

4. Social

The heritage inventory is mainly focussed on the tangible structures or features, while the social value is often associated with the intangibles relating to association and meaning. This is the reason for the lower weighted value allocated to social value, with a strong recommendation to explore the intangible aspects of the cultural landscape in a follow-up project. The presence of meaning, cultural associations, schools, churches and recreational facilities were assessed to give a score out of ten. The higher the community value, the higher the score out of ten.

5. Economic

The main economic driver in the Stellenbosch landscape is centred on the production of wine and this also constitute the foundation of the tourism and hospitality industry. Economic value in this case, therefore, relates to the soil potential for the production of wine. A soil suitability map (Phase 2a Report) was used as a base. Depending on the degree of cover per landscape character unit, the following scores out of 10 were allocated:

- *High soil suitability 10*
- *Medium soil suitability 7*
- *Fragmented land parcels 5*
- *Disturbed 2*

Box 1 Character assessment and grading of a landscape character unit (C02).

landscape character unit C02, Eerste River Valley Stellenbosch Farms.

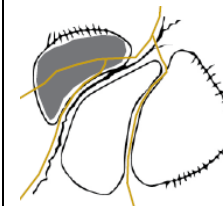
C02 Enclosed bowl with prominent historic pattern

This enclosed land unit sits as a bowl within the rolling Bottelary Hills. A valley line runs through the middle and forms the backbone to all the natural and cultural layers found within this unit. A small area of critical biodiversity is found in the upper reaches of Ribbokkop and the valley bottom functions as an ecological support area.

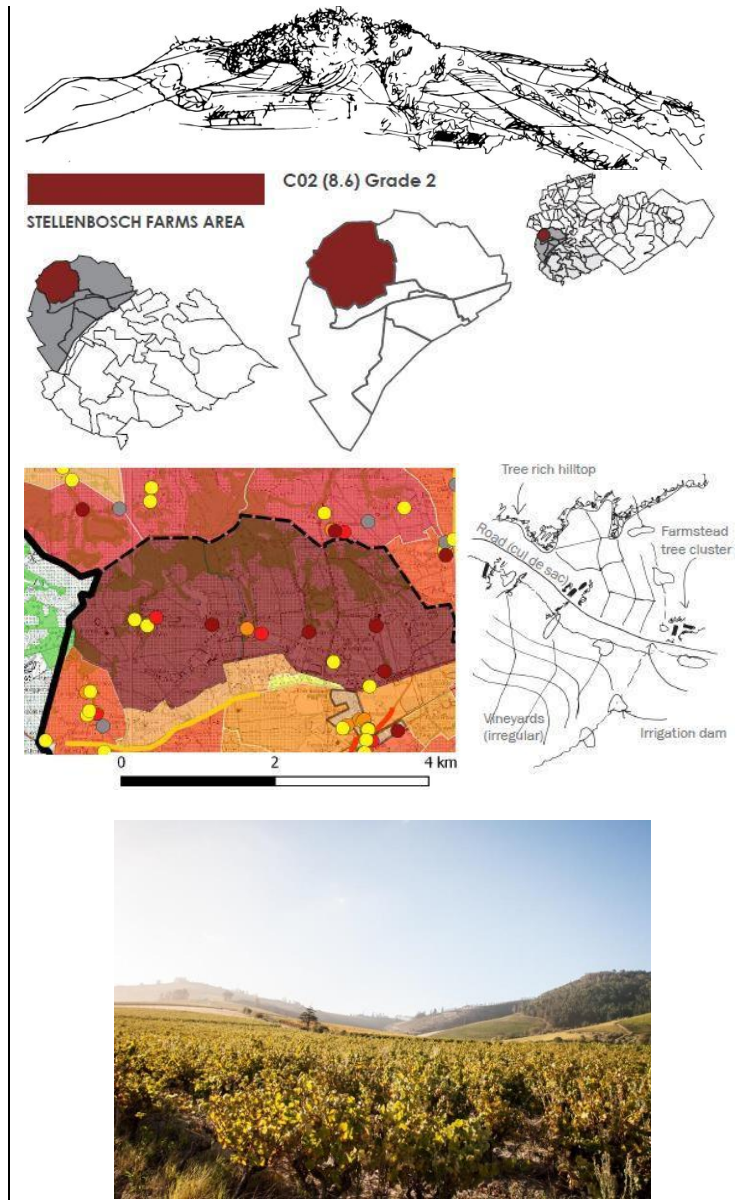
The key features are the rolling vineyards set against the tree-rich hilltops of the Bottelary Hills, and views back towards the Stellenbosch mountains add a special quality to the sense of place. Irregular vineyards following the contours and associated irrigation dams in the valley create a balanced yet diverse texture. High soil suitability (wine production) is found on the east- and south-facing slopes. The Stellenbosch Kloof Road follows the alignment of the old wagon route and now terminates in the last farm called Jordan.

The first freehold land grants lie parallel to the road and river and form the base for the historic settlement pattern. This pattern is a display of typical Cape Dutch settlement dating from the 1700's, with the oldest being Uiterwijk (De Waal), the parent farm that follows almost the exact alignment of this landscape character unit. The farm werfs located as a pattern along this road are some of the finest in the area, many of them form landmarks directly adjacent to the road.

This sub-valley has very high landscape significance, exhibiting the unique interplay between wilderness, the rural landscape and the pattern of settlement that is so characteristic of the Cape Winelands, and it is largely untouched by large-scale modern housing and infrastructural developments. Intrusive stand-alone residential mansions are visible on the upper reaches of the Bottelary Hills. These components are intrusive in terms of their size and position in the landscape.



Eerste River Valley
Stellenbosch farms C01-C10
C02



The grading of the landscape character units scored the following:

C Eerste River Landscape Unit Rating		C01		C02			
Item	Item Weight	Value	Weighted value	Value	Weighted value		
Ecological	Protected areas 10 Critical Biodiversity area 9 Ecological support areas 7 agriculture 4 Urban 1	20%	7.5	1.50	8	1.60	
	Aesthetic	Viewshed, Scene, Diversity, enclosure, unity, colour, texture, balance, proportion, form	20%	8	1.60	10	2.00
	Historic	Age, Pattern representivity and Association, rarity, condition	25%	8	2.00	10	2.50
Social	Meaning and cultural Associations, Church, School, Creche, recreational, community	10%	3	0.30	5	0.50	
Economical	Tourism and agricultural potential High soil suitability 9 medium soil suitability 7 Fragmented 5 Disturbed 2	25%	7	1.75	8	2.00	
	Degree of acceptable change/development potential	100%		7.15		8.60	

NCW	0- 2	
Grade 3C	2 to 4.9	
Grade 3B	5 to 7.9	
Grade 3A	8 to 10	
Grade 2	8.5 to 10	

Landscape Character Units that scored 8.5 or higher in the evaluation process are the equivalent of a Grade II heritage resource in significance and will be protected as a proposed heritage area and/or HPOZ.

The only deviations from the above rule are the entire Jonkershoek (D01 to D03) and Boschendal (F06) landscape character units. They have both been assessed as proposed Grade II Provincial Heritage Sites (PHSs) in terms of the National Heritage Resources Act. However, by formally grading them as a Grade IIIA heritage resource, they are also protected at municipal level through Heritage Overlay Zones (this is already the case). This will help to ensure that the character of these landscape character units, some of which overlay the proposed PHS areas, are sensitively managed.

Certain areas within the study area have been identified as 'degraded', or where the character has been altered to such an extent due to incompatible land use that it has become intrusive. These land uses include fragmented land parcels (small holdings / lifestyle plots), large scale commercial / industrial development, single intrusive residential units, extensive gated estates (residential / business), agricultural covering (glasshouse / plastic / netting), mining, landfill sites and other elements such as nurseries, open fallow (disturbed) land and chicken broilers.

The majority of incompatible / deviated land uses identified in the study area are located along routes, and these had an implication for the identification of Scenic Routes. It is evident that roads tend to fragment landscapes (figure 21). The larger a landscape character unit, the larger the area of uniform character, and the more important those units are in the cultural landscape. Furthermore, some of these degraded areas that fall into Grade IIIC landscape character units, have been graded as Non Conservation Worthy (NCW) and mapped accordingly.

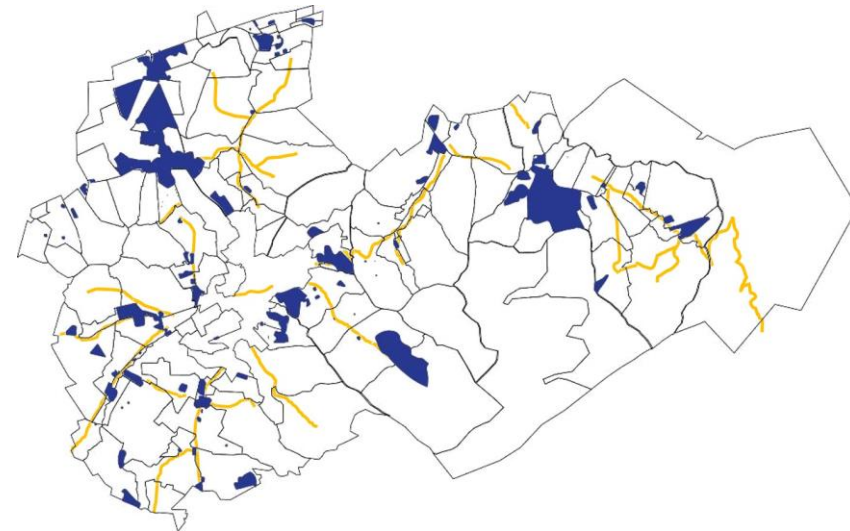


Figure 19: Deviations with a degraded landscape character due to incompatible land use in the study area

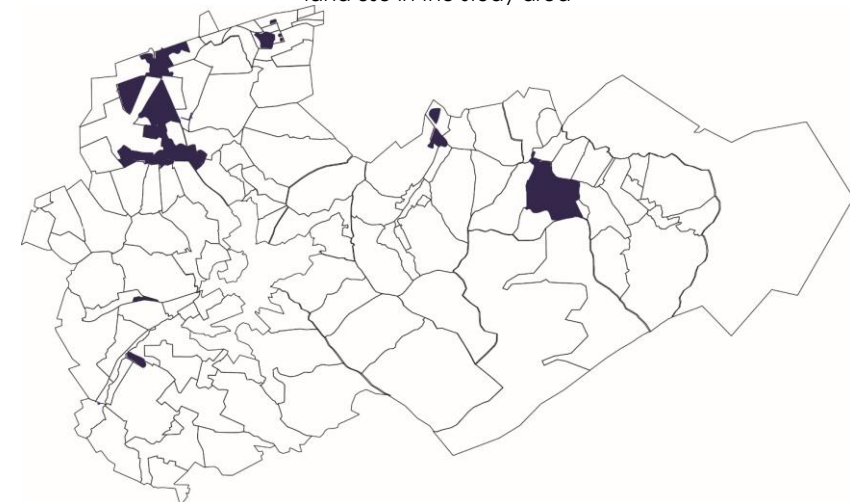


Figure 20: Non Conservation Worthy land parcels

The study also identified several landform crest-lines that hide development and maintain uninterrupted viewsheds (figure 22). The resultantly contained land units have been identified as key units that uphold the rural character in the study area (figure 21).

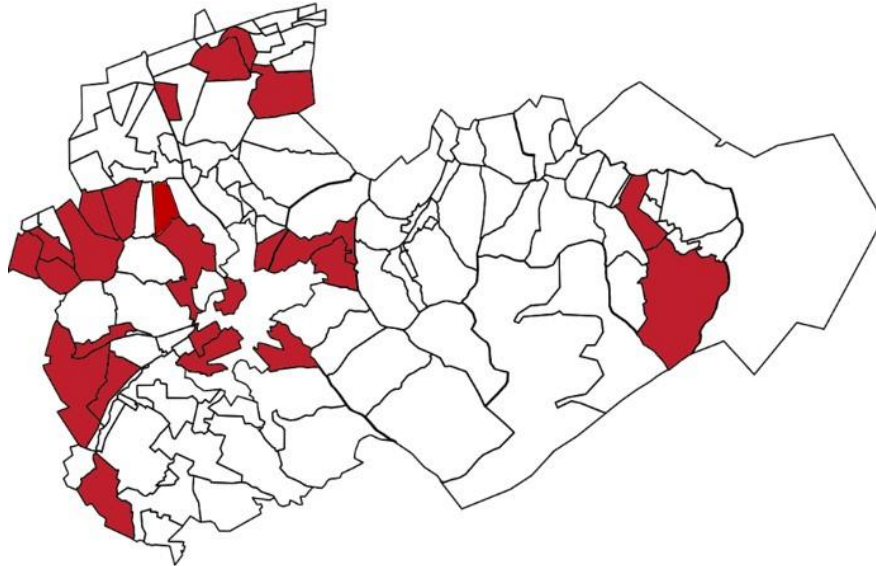


Figure 21: landscape character units that uphold the rural character of the Stellenbosch Area

The significant rural character of some towns in the Stellenbosch municipal area (such as Franschhoek, Pniel, Jamestown) is dependent on this weaving of natural and agricultural areas into the urban fabric.



Axonometric view of Stellenbosch with its backdrop against the dramatic mountains



Line of site



Importance of landscape units that uphold the rural character of Stellenbosch (view from Blumberg Road over Devon Valley)

Figure 22: Graphic illustration of crest lines that hide development from major viewpoints (for example this view from Blumberg Drive)

3.2 SCENIC ROUTES

Scenic routes are movement corridors that traverse areas of outstanding scenic quality. The focus area of identification is the Scenic Drive Envelope, which includes the carriageway, the road reserve, the land directly adjacent to it, and the scenes in which the views terminate.

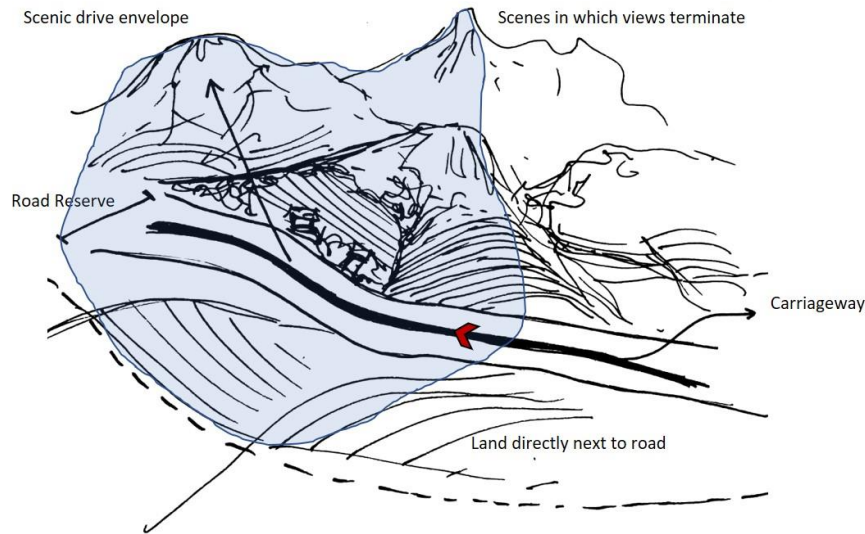


Figure 23: The Scenic Drive Envelope

The criteria for identifying scenic routes used by the Cape Town Metro (2003) were followed:¹⁹

1. Outstanding scenic quality. The degree to which the Scenic Route possesses outstanding qualities which convey a memorable impression on the observer; those qualities considered irreplaceable or unique to a landscape.
2. Representative scenic qualities. The degree to which a drive is representative of an area, therefore not necessarily unique, but

distinctive as far as it is associated with a set of characteristics of a particular area.

3. A range of scenic qualities as a continuous experience. The extent to which the route provides an experience which is continuous, and which provides for a variety of scenic qualities that are consistently apparent and of significant quality for the majority (length) of the route with minimal gaps and intrusions. Or the extent to which it is part of a larger network and represent regional themes, for example, the wine routes.
4. Significant natural resource value. The extent to which the route traverses, or is adjacent to, or which provides significant visual access to relatively undisturbed, pristine natural environments, and that have natural features that are representative of or unique to the region.
5. Significant cultural landscapes. The extent to which the route traverses landscapes which reflect the traditions, practices, and ways of life of particular social groups over time.

Some of the major threats identified by the Cape Town Metro Study was the loss of scenic value, wilderness experience and rural character in the cultural landscape due to commercial development and insensitive road improvements.

3.2.1 Application and findings in Stellenbosch

3.2.1.1 Outstanding Scenic Quality

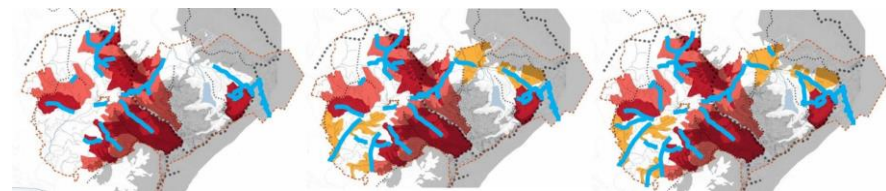


Figure 24: Method of identification of Scenic Routes based on significant landscape character units

Scenic Routes were determined in conjunction with the character and significance of the landscape character units. The route mapping

¹⁹ The criteria in the *Scenic Drive Network Management Plan of the Metropolitan Council of Cape Town* (2003) were provided via email by Nicolas Baumann, one of the authors of the report.

process identifies the significant 'backbone' elements of landscapes, in addition to their aesthetic, historic, economic, ecological, and social values (see section 3.1.2 *The Landscape Method Summary* for more detail on this). For this reason, any 'R' or 'M' graded route (like the R44 or the M121) that traverses a Grade II landscape was mapped as a Grade II Scenic Route. Likewise, if a route traverses a Grade IIIA, B, or C landscape, it was mapped as a Grade IIIA, B or C route. When a route is aligned between a Grade II and Grade IIIA landscape, it is mapped as a Grade II Scenic Route, taking cognisance of the higher scenic value of the surrounding environment. Likewise, when a route is aligned between a Grade IIIA and Grade IIIB landscape, it is mapped as a Grade IIIA Scenic Route.

Exceptions included the importance of views from the road in which the scenes terminate, sometimes overriding the grading of the landscape character units directly next to it. These exceptions are:

1. R44 entering Stellenbosch (figure H);
2. Blumberg Road (figure I);
3. A small section of Annandale Road.



Figure H: Scenic route entering Stellenbosch on the R44



Figure I: View from Blumberg Drive

This rather straightforward approach to the scenic routes in the Stellenbosch winelands played an important role in the identification of scenic route corridors. The field verification confirmed these routes and picked up on intrusions along the way. Cognisance was taken of elements regarded as deviations in terms of land use. Some are even seen as intrusive within the landscape (see 3.1 Weighting and Scoring), and this had a bearing on the extent (beginning and end) of the specific scenic route.

3.2.1.2 Representative Scenic Quality

Variations in representative scenic quality were reflected in the narrative of routes, where they represent specific themes such as wine routes, routes with geological interest and areas of natural beauty, such as pockets of Renosterveld in the Bottelary Hills (not necessarily unique, but distinctive of an area). An example is Kromme Rhee, where the route is distinctly agricultural (vineyards), with almost no development visible from the route.

Scenic routes were compared to each other based on respective characteristics of the surrounding landscape character units, to ensure that the range of scenes in the cultural landscape of Stellenbosch is represented. The Knorhoek Road is another example where areas of wilderness and rural

are found with limited development intrusion. This route also formed part of the first wine routes within the winelands.

3.2.1.3 A range of scenic qualities as a continuous experience

A rudimentary, yet effective viewshed analysis was conducted to understand the experience of the user. The present study would greatly benefit from an in-depth viewshed analysis. It is not always the case that highly elevated routes with wide views and dramatic backdrops are the most scenic. Routes that pass through a range of scenes as a continuous experience may be just as important. ,

The Elsenburg Road is a good example, where views transition from wide open views over areas of agricultural significance to more enclosed views at the Elsenburg node.

3.2.1.4 Significant natural resource value

In the Stellenbosch Winelands, the topographical types include mountain peaks, rolling foothills and fertile valleys. It was important that scenic routes were analysed to represent each of these landform structures, with their relevant vegetation types and geology, as they are the foundation of the significant natural resource value.

The Jonkershoek Road ends in the Jonkershoek Nature Reserve, a 'pristine' natural valley within the winelands.

3.2.1.5 Significant cultural landscapes

Arising from the heritage inventory, important patterns of settlement formed part of the documentation process. These patterns are discussed in section 5.1 of this document. Where scenic routes traverse these valuable cultural landscapes, they were marked as such.

The Stellenbosch Kloof Road is an example of a pattern of 18th-century colonial settlements, notably visible in proximity to the route. This route has an enclosed scenic quality and it is free of development that has engulfed other rural and urban areas in the winelands. The Helshoogte Drive (figures J & K) displays majestic mountains and nodes of cultural settlement along the way. These nodes include Ida's Valley, the mission settlement of Pniel and numerous historic Cape Dutch and later farms, such as Boschendal. The route transitions through nodes, ever-changing views and natural splendour, which marks it as one of the finest scenic routes in the winelands, and perhaps of broader significance.

Scenic routes are drawn as a single line on the overall map (figure 28) with a view to legibility in representation, but in Phase 4 of the project, the entire scenic drive envelope will be shown as a corridor. These corridors have varying significance, ranging from national, provincial and local.

Scenic Routes are each discussed in association with the landscape character units they traverse. Please consult the respective landscape character unit sheet for further information about the aesthetic significance of the landscape character unit and, therefore, the significance of the Scenic Route.

The implications of identifying and grading Scenic Routes as part of the Heritage Inventory and subsequent Conservation Management Plan are that they will be reviewed as part of the Zoning Scheme and will be promoted as official Scenic Routes.



Figure J: Simonsberg from the Helshoogte Pass

3.3 TOWNSCAPE CHARACTER DEFINING PROCESS

3.3.1 TOWNSCAPE CHARACTER UNITS

Parts of the town of Stellenbosch have been the subject of two recent, stand-alone heritage surveys. Both have been approved by Heritage Western Cape. These are for the historic core of the town and for the core of the Stellenbosch University campus. Therefore, these areas were excluded from the heritage inventory undertaken as part of this project insofar as the evaluation and heritage grading of individual properties is concerned.

However, the concepts and methods devised and adopted for this wider inventory of heritage resources are broader than the previous studies, and rely on the identification, inventory and grading of areas as well as of individual sites. Fundamental to the method has been the determination of a 'cascade' in scale from the larger valleys and areas to nested smaller ones: the latter termed 'landscape character units'. These concepts and methods are not only relevant in wilderness and rural domains; they also apply to the towns and other urban nuclei within the municipality. Thus, we also identify 'urban, or **townscape character units**' of cultural significance.

The landscape character units were identified and evaluated according to four main categories, namely 'natural elements' (such as landform and geology), 'cultural elements' (such as forestry and settlement), 'perceptual elements' (such as view sheds and scenic routes) and 'defining elements'. It is this latter group that dominate in the evaluation of townscape character units.

Elements such as structure, pattern, grain (height, mass, size), edge, network, landmarks / view points and nodes are key to the understanding and day-to-day navigation of any townscape. It is the interplay of these that give particular areas, precincts and neighbourhoods their specific character and identity. Often, these elements combine in public places, spaces and areas within a neighbourhood, and become of higher cultural significance than the specific structures and sites that constitute the 'parts' within the 'whole'. Heritage practice has now recognised that it is the contribution of these 'parts' to the patterns and character of the 'whole' that is of primary heritage significance.

Therefore, an evaluation and the identification of the urban or townscape character units of cultural significance, and worthy of protection, was seen to be critical to the heritage survey and inventory as a whole.

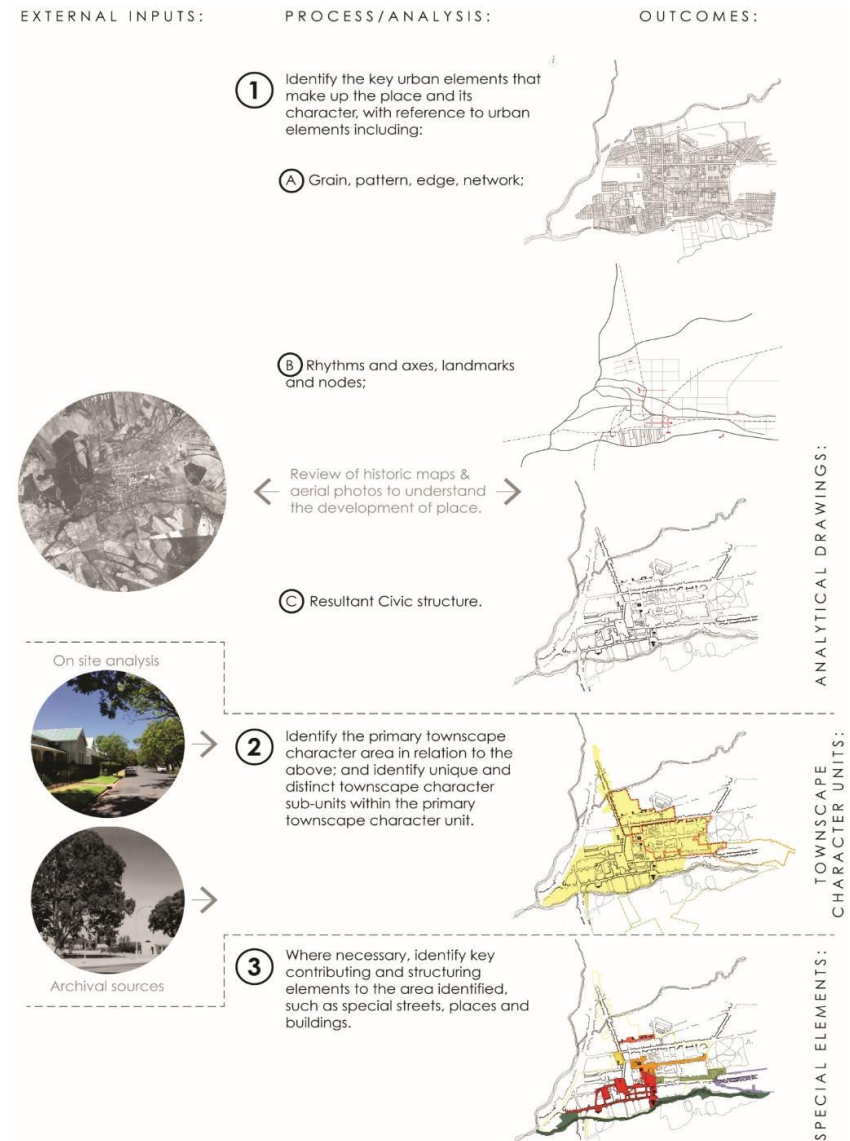


Figure 25: Townscape Character Study process

3.3.2 METHODS OF PROTECTION

The method of protection most commonly used for townscape character areas in the South African context is the 'Heritage Area' – a geographical space where a specific character is recognised as being of cultural significance and is protected. Furthermore, guidelines are often produced to inform residents and others of the degree of change that could be contemplated within these spaces, and which 'patterns' should be respected and strengthened over time.

While the National Heritage Resources Act (Act 25 of 1999) has within it the means of identifying and protecting Heritage Areas (Section 31), at the local level they can also be identified in the relevant Zoning Schemes as **Heritage Protection Overlay Zones** (HPOZ). Historically, these spaces are primarily administered at the local authority level of government.

This 'doubled up' nature of protection means that a Grade I National Heritage Site, such as Ida's Valley, could also be identified as a HPOZ in the Stellenbosch Zoning Scheme.

The Commission for Architecture and the Built Environment (CABE) points out that historic areas have always undergone changes, and the expectation should be that they will continue to change and evolve, to accommodate new uses and meet new priorities. Change should not be taken as automatically undermining the integrity of an historic place. Instead, the special and valued characteristics of an historic place should influence the way it is managed. The type of special historic character the area possesses, be it visual, functional, or social, should be evaluated and identified. Any new development can then be assessed in terms of its contribution, or otherwise, to the particular character of the neighbourhood.²⁰

3.3.3 EXISTING TOWNSCAPES WITH RECOGNISED HERITAGE SIGNIFICANCE WITHIN THE MUNICIPALITY

Aside from the historic core of Stellenbosch and the historic core of Stellenbosch University, the Municipal area has several recognised HPOZ / Heritage Areas already protected in law.

Chief among these is the Franschoek Heritage Area, which stems from Todeschini and Japha's 1988 Survey and Conservation Study of the town. In addition to this, a 2011 proposal saw the establishment of HPOZ

areas in the Jonkershoek, Ida's Valley and Dwars River precincts. 'Special Areas' were identified at Raithby and Jamestown.²¹

We have duly mapped these identified (although proposed) heritage areas and evaluated them in the field. They have all been incorporated into the proposed new townscape character units, albeit with some modifications and sometimes with slightly more inclusive boundaries. In no instance was an HPOZ or Special Area found to have insufficient heritage significance to warrant its exclusion from a proposed townscape character unit.

3.3.4 IDENTIFYING TOWNSCAPE CHARACTER UNITS

Fabio Todeschini (2011) defined a cultural landscape as the inter-relationship of the man-made with the natural landscape and noted the "reciprocal relationship (which) has spanned millennia and many generations of people, their values, beliefs, practices and traditions. The product, which is never finished and always remains in a 'state of becoming', is you and I and the landscape setting which we perceive, use and enjoy ... They are adapted, designed, settled landscapes in the frame of nature. Cultural landscapes reflect social, economic, technical and aesthetic values, as well as ecological ones".²²

The key natural elements underlying the evolution of the cultural landscapes of settlements located within the Stellenbosch Municipality include their position within relatively wide and flat valleys created by the confluence of river courses. For Stellenbosch itself, the town occupies the valley bottom at the junction of the Eerste River and Krom River, which are abutted by very tall mountain ranges beyond. For Franschoek, the Franschoek River and its tributaries run through the town, which is encircled by high mountains. The smaller settlements of Raithby, Jamestown, Pniel (figure K) and Lanquedoc are all situated along smaller river courses.

Ida's Valley Township departs from this logic of settlement, being associated with forced removals in the mid-20th Century, yet there are streetscapes of special character within this settlement.

²⁰<http://webarchive.nationalarchives.gov.uk/20110118174717/http://www.cabe.org.uk/files/cabe-and-the-historic-environment.pdf>

²¹ See the New Stellenbosch Zoning Scheme: Appendix to the Zoning Scheme: Overlay Zones. Draft for Public Participation, prepared by @Planning. 30th May 2012.

²² Todeschini, F. (2011) Heritage Resources Inventory of the Constantia-Tokai Valley for the City of Cape Town region. These patterns of subdivision are still strongly discernable in smaller towns such as Raithby and Jamestown.



Figure K: Pniel

The flatness of the valley bottoms created by these networks of rivers and streams made it easy to access, cultivate and settle these spaces, and the long subdivisions of land running from road to river were key early features of all settlements within the study area.

The wagon routes leading to the surrounding mountain passes and fording the rivers had a similar influence on the pattern of settlement.

By the time the two primary towns within the region began to expand in the late 19th century, the grids for these expansions were pushed and pulled by these earlier urban layers, which thus become characteristic of the cultural landscape of the towns.

In each instance, the townscapes within the municipality have been assessed according to the following method:

- Identify the key urban elements that make up the place and its character, with reference to urban elements including: structure, grain, pattern, edge, network rhythms and axes, landmarks and nodes;
- Review historic maps and aerial photography for the town, in order to understand the development of place;

- Undertake on-site analysis of the townscape, supported by archival sources such as historic photography of the townscape;
- Identify the primary townscape character area in relation to the above;
- Where necessary, identify unique and distinct townscape character sub-units within the primary townscape character unit, and describe the significance and character of each;
- Where necessary, identify key contributing and structuring elements to the area identified, such as special streets, places and buildings.

The **Stellenbosch, Franschhoek, Groendal, Raithby, Jamestown, Pniel and Lanquedoc Townscapes** are described in detail under the following headings:

1. Identifying the Key Urban Elements and Primary Townscape Character Unit.
2. Special Streets, Places and Buildings within the Townscape Character Unit.

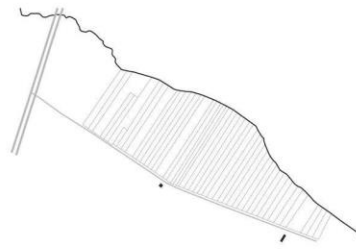
All of these townscapes have been assessed to have unique characteristics, worthy of protection. In Stellenbosch, we have carefully reassessed the historic core area, and have extended it in certain places. Stellenbosch, in particular, is further broken down into smaller townscape units of distinct character, namely the core campus area of Stellenbosch University, Mostertsdrift and the "Die Vlakte" area, which is a historically significant site of forced removals. Additionally, a special area is proposed for the green Coetzenberg Precinct.

The detailed descriptions, analysis and proposals relating to the townscape character areas can be found in Appendix 3.

JAMESTOWN

1 Identifying the Key Urban Elements and Primary Townscape Character Unit

Jamestown would once have strongly resembled an the archetypal Cape Mission Settlement: a primary street running parallel to a river course; a church occupying a prominent position; cottages lining the road; long, narrow farming allotments running between each cottage and the river course; and an agricultural and wilderness backdrop to the whole.



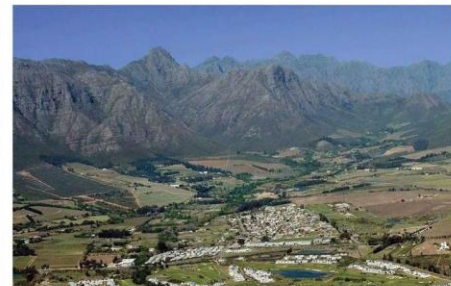
c1938 aerial photography attests to the strong pattern that would once have existed, with the narrow allotments also extending from the cottages up the hillside, to the south. In essence, Webersvallei Road would have formed the central spine to the settlement, with the church located at the top of the hill.



2 Identifying Threats to the Townscape Character

Unfortunately in Jamestown, gentrification has meant that only the long farming allotments are still clearly legible in the townscape. The area south of Webersvallei Road has been entirely developed, with a mid 20th century suburban pattern of street compromising any village character that remains. The interface with the R44 has also been developed in an insensitive manner, with "strip mall" and car outlets creating a buffer between the main road and the historic village.

More worryingly, development has begun to encroach to the north of Webersvallei road, threatening the narrow farming allotments that run down towards the Blaauwklippen River – these being the last townscape element/settlement pattern that visually and symbolically connects Jamestown to the other 19th and early 20th century Mission Settlements at the Cape.



JGC Williams General Dealer has been closed for many years. <http://www.mystellenboschstory.co.za/story/d-jamestown>.

Jamestown in 2015, showing gentrification and sprawl at its edges. (Jamestown Erfnis).

3 Identifying Special Streets, Places & Buildings within the Character Unit

The farming allotments are seen to be the most significant element within Jamestown, spatially and symbolically connecting it to the grouping of Mission Settlements, which are of significance in the history of the Cape and the Province.



Additionally, Webersvallei Road and the first row of plots facing northwards onto it is included in the townscape character area: it is here that the key community and institutional sites are located (the churches and the general store), but it is also where the historic scale of the cottages, and their relationship to the agricultural allotments, can still be discerned.



One of the last remaining family-owned and farmed allotments in Jamestown. (Arendse, 2014: 113).

These elements are collectively seen to embody the core remaining townscape character of Jamestown, and should duly be protected, and development controlled to ensure this historic pattern is retained and strengthened.



1924 photograph of the Rhenish Church congregation with founder, Rev. Jacob Weber. (Jamestown Erfnis).

4 Identifying Townscape Character Unit

Jamestown: Special Streets, Places & Buildings

- Water Erven
- Street & Buildings Fronting Webersvallei Rd
- Core Townscape Character Area

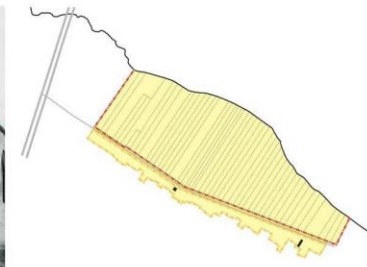


Figure 26: Example of a Townscape Character Area analysis, description and proposal for the Jamestown area.

3.4. HERITAGE SITES IDENTIFICATION AND ASSESSMENT

3.4.1 PROCESS

Members of the project team were assigned specific identified major valleys that comprise the study area and undertook the fieldwork survey of heritage sites in those valleys. Each investigator used the information reflected in the historical development sequence represented in the maps contained in the Phase 2a Report. They also had access to socio-historical material compiled by Tracey Randle and Antonia Malan. Previous and recent surveys of heritage sites in parts of the study area were obtained and consulted prior to fieldwork (statutory reports, theses, etc.), as were other sources against which to track change over time (such as surveys of the built environment by Franssen (1980, 2004) and the Todeschini and Japha surveys conducted several decades ago).

Given the many hundreds of sites, the exercise was undertaken day after day over many months and has required thousands of person-hours and kilometres of travel to inspect the current situation of each site in the field. Many appointments were made with particular owners, to gain access to rural properties. As our approach has been towards inclusivity, the range of heritage-worthy resources is very wide (and now extends into the 1970s), which partly offsets the many losses that have occurred over the past decades. We have also consulted with Docomomo SA regarding modernist and contemporary sites, and these have been included in the revised inventory, as appropriate. Moreover, as consequence of comments received up to and including the 6th April 2018, during the course of April we revisited many sites and areas (generally two members of the professional team jointly) and have, as a consequence, added some sites to the inventory.

3.4.2 METHOD

The survey of each area proceeded on the basis of the guidelines provided by HWC (see Appendix 3 of the Phase 2a Report). Wherever and whenever possible, sites were visited by more than one team member, so as to foster necessary discussion and a proper application of comparative judgement as to the grading of the resource.

A tablet application, developed by Cedar Tower Services, was used to capture the necessary information during fieldwork. The information

fields included location (GPS coordinates), type of resource, a description, and a photographic record at the time of the inspection. The information was directly fed into an Excel Spreadsheet linked to the GIS database, which is the major product emerging from the entire exercise, as reported on below. This was loaded onto the online project database and could be checked and edited during the course of subsequent iterative desktop sessions.

During the course of fieldwork, the tablets and data capture utility underwent robust testing and review. For instance, it was necessary to standardise the entries and to establish systematic and balanced comparisons of information relative to classes of heritage sites. As the work progressed, the desktop sessions (typically involving two or more members of the team) also helped to identify common and disparate features, and refined the format and content of the online database. It was during many such sessions that the level of significance of the resources was iteratively and comparatively defined, with due regard to international best practice, the NHRA and the HWC guidelines in this regard.

3.4.3 LIMITATIONS

Typically, a number of difficulties were encountered during the course of fieldwork. Whereas some decades ago there were few impediments to travel and fieldwork in rural areas utilising farm roads, at the current time security considerations have led to the presence of a significant infrastructure of fences, walls and locked gates. As a result, entry could be delayed by hours or even weeks before arrangements for access could be made by phone or email with the property owners, occupants or managers. There have been some cases where it has not been possible to inspect places that were identified as heritage sites in the past or during public meetings. In such cases we have noted this. We sincerely thank those property owners and occupants who trustingly let us in, allowed us to look around, and shared their knowledge.

It is in the very nature of heritage inventories that, even despite best efforts to the contrary, some sites that should be included may have been overlooked for one reason or another. This is precisely why the inventory is a living document and is in electronic format: further sites and related information can and will be added in the future. The inventory has been formulated to facilitate this iterative, inclusive and evolving process.

4 THE INVENTORY

During the initiation phase of the project, a Geographic Information System (GIS) was developed and populated with preliminary spatial and attribute datasets extracted from existing sources. The GIS layers produced for the Cape Winelands Heritage Inventory Survey Project were analysed and defined using QGIS, an open source GIS platform. The Phase 2a maps were produced from the various shapefiles and datasets collected during Phase 1. The fieldwork team met with the software development team to devise and determine the categories of information (fields) to be captured in the heritage inventory audit. Many of the fields were derived from existing, mandatory minimum standard datasets held by Heritage Western Cape and SAHRA. Additional fields relevant to the methodology covered in this report were added to the database design schema.

A digital application (OpenDataKit - ODK) was specifically developed for the fieldwork phase to streamline the process of collecting information about the various sites. The ODK was set up on Android tablets to carry on surveys. The App captured the GPS locations of each recording as well as site photographs and the database records. The App works offline and once the fieldworkers were within range of an internet connection (WiFi or 3G mobile internet) the App would automatically synchronise the data to a Cloud-based spreadsheet.

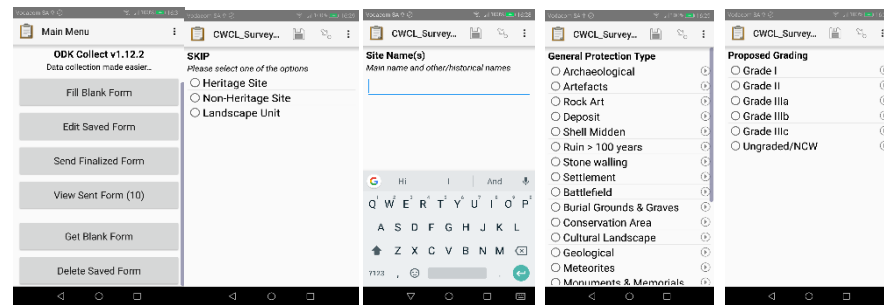


Figure 27: Digital application interface for fieldwork

The spreadsheet was hosted on Google Drive and throughout the project all members of the team were able to access the records (figure 24 and figure J) in real time to make edits or comments. This was extremely useful in connecting disparate recordings across a large geographical area

with multiple fieldworkers in operation. This spreadsheet also fed into our QGIS platform so that the points in space could be verified for accuracy or errors, and results could be interpreted through the mapping interface.

ID	User	Site Name	Landscape Unit	Property Number	Site Address	Longitude	Latitude	Current Use	Original Use	Site
21	fabio	66 Merriman Road, Stellenbosch		4077	66 Merriman Rd	18.86698333	-33.93108177	Residential	Residential	Sing
22	fabio	66 Merriman Road, Stellenbosch						Residential	Residential	Sing
23	fabio	70 Merriman Road, Stellenbosch		2409	70 Merriman Rd	18.86749	-33.9321275	Residential	Residential	Sing
24	fabio	Christ Church/Sl. Paul's Church		2538	34 Banghoek Rd	18.86087833	-33.93043833	Church	Religious	Churc
25	fabio	Old Luckhoff High School		13608	Banghoek Road	18.86309833	-33.93035167	Stellenbosch Uni School	Stellenbosch Uni School	Sing
26	marke	Bellevue estate						Wine farm with a Agriculture		
27	marke	Knoorhoek (Kleygat)	A14	8/1362	R44 Knoorhoek R	18.87007227	-33.8793855	Agriculture	Agriculture	Orig
28	marke	De Clapmuts	A09	RE1063	R44	18.85478184	-33.85096085	Agriculture, resta	Agriculture	U-sh
29	marke	Devera wine estate	A16	RE41		18.8605928	-33.8403379	Restaurant		
30	marke	Elsenburg	A09	RE34	R44 Elsenburg R	18.83771079	-33.84727883	Agricultural Collc	Agricultural	Est
31	marke	Simonsg	A07	3166	R304 Kromme F	18.82537846	-33.86998767	Wine estate, rest	Agricultural	Late
32	fabio	JMH Sports Grounds		RE16533	Sachwal Street	18.87283333	-33.83841	Sports Grounds		Spor
33	fabio	13a and 13b Van der Stel Road, Stellenbosch		3413	13a and 13b Van	18.87951833	-33.93637167	Residential	Residential	Sing
34	fabio	11a and 11b Van der Stel Road, Stellenbosch		15722, 15723	11a and 11b Van	18.8753955	-33.936395	Residential	Residential	As 1
35	41	fabio		6168	9 Van der Stel Ri	18.875175	-33.93632667	Residential	Residential	Sing
36	41	fabio		1575	3 Van der Stel Ri	18.87469167	-33.936385	Residential	Residential	Sing
37	44	fabio		7395	6 Van der Stel Ri	18.87529667	-33.936415	Residential	Residential	Sing
38	45	fabio		1613	10 Van der Stel F	18.87956667	-33.93642633	Residential	Residential	Typ
39	46	fabio		1612	12 Van der Stel F	18.87610833	-33.93628	Residential	Residential	Sym

Figure 28: Google Drive based Site Inventory spreadsheet.

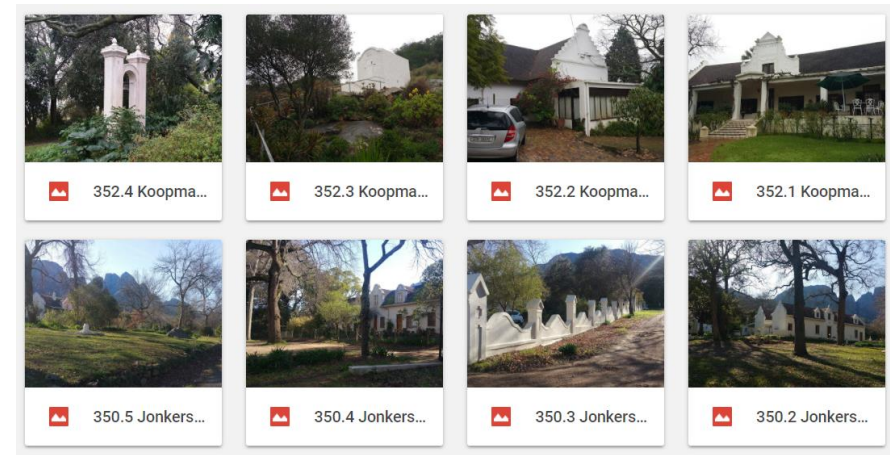


Figure L: Photos that accompany each line of the spreadsheet

Following the fieldwork, the results of the heritage survey were uploaded to an online questionnaire and map so that members of the public could log comments, point out omissions and suggest corrections. The Public

Survey also enabled members of the public to submit sites they deemed significant in terms of social or cultural values. These sites were captured digitally and each site was visited and assessed during the fieldwork phase. Those sites with a tangible manifestation and a high significance were included in the Inventory or landscape character unit sheets and evaluation (Social Value). Members of the public were provided guidance and assistance during workshops held in Stellenbosch. Links to the online questionnaire were distributed via email to people who had registered an interest in the project as well as the registered conservation bodies and other stakeholders identified for the audit. The additional sites submitted from this process were included in the project database if they were deemed potentially conservation-worthy. It is suggested that the Stellenbosch Municipality endeavour to use the full Public Survey database for the foundation of a further heritage project, as it is highly significant but beyond our brief.

The Landscape Character Analysis process required the identification of landscape valleys, areas and smaller units. The intricacies of the landscapes were most effectively viewed and understood on Google Earth, and the landscape character unit layers were subsequently developed on this platform. The resultant .kml files were exported to QGIS and merged with the project database and final mapping. Furthermore, each landscape valley, with its various areas and smaller landscape character units, was described, mapped, graded, and illustrated in detail in a special report, each with a standalone A4 sheet (See Appendix 4).

The descriptions and gradings of sites, scenic routes, Grade I areas, landscape character units and townscape/urban precincts were exported to an online web map using a QGIS plugin called *qgis2web*. Other layers (soil suitability for viticulture, urban edges, Cape Nature's Biodiversity Spatial Plans) were also exported to provide additional layering and information to the public. The compiled website uses embedded Javascript code to display the various layers over a streaming geographical map, with the ability to attach clickable content to the points of reference such as landscape character units and sites.

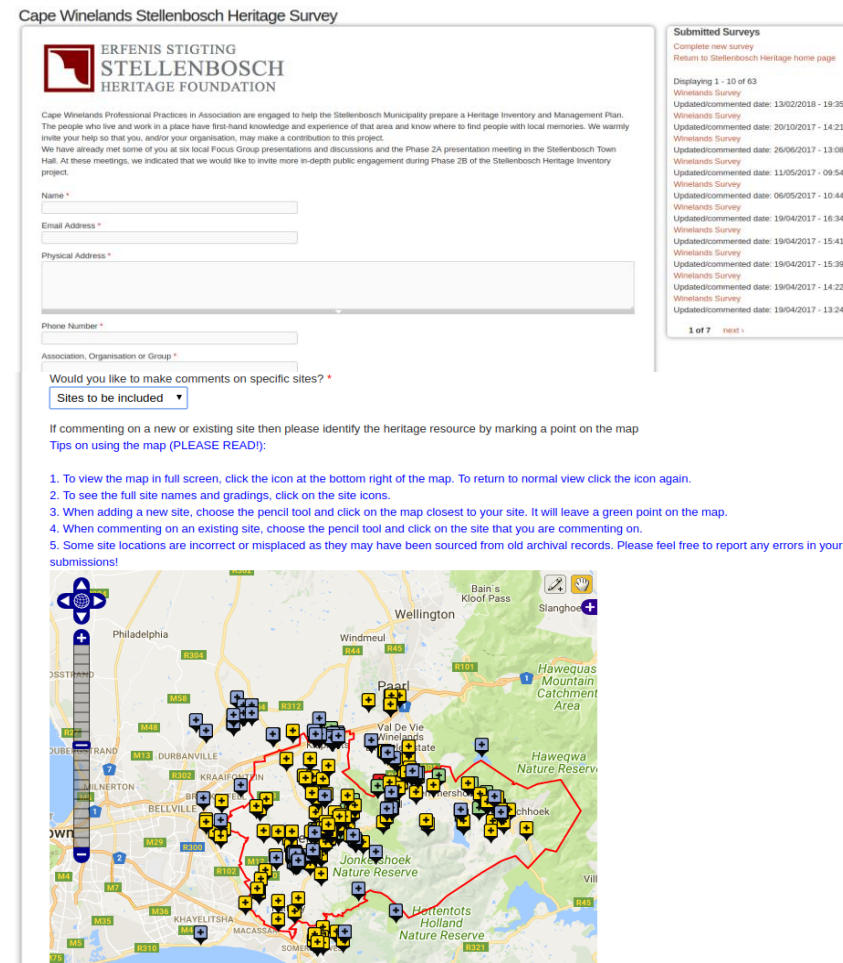


Figure 29: Public Survey form hosted on the Stellenbosch Heritage Foundation website.

A separate Microsoft Access database was used to design the PDF report format of around 800 heritage sites that were audited for this survey. It is possible to bulk generate the PDFs en masse at the conclusion of the data moderation process. These PDFs are linked to the clickable points on

the online map and provide the full record and site photo of each heritage resource. In addition, the landscape character unit and area sheets were also linked to clickable points, to immediately provide the landscape context and value for any site.

The advantages of having an online map in addition to the stand-alone PDF survey reports, are that *inter alia*:

- Owners and members of the public can find a specific property and go directly to the relevant information rather than perusing the entire report. This saves bandwidth and time.
- Sites, landscape character units and townscapes can be viewed spatially and cross-referenced to other points on a map, which is not always possible using a printed image of a map.
- Users can choose what they would like to see by switching layers on and off.
- The map will be available on the Stellenbosch Heritage Foundation's website which will attract hits and an increased number of visitors to the general work they do.

- The map provides much finer-grained detail than the report version as the users can zoom in and out.
- Users can be directed to the key points in the reports that should be taken into account when viewing the maps.

The online map is hosted on the website of the Stellenbosch Heritage Foundation with a landing page explaining the maps and how users can navigate them to find sites and access the results of the audit. This online map may be hosted there for at least the next 5-10 years as the bureaucratic processes finalising the recommendations made by the inventory audit will take another 1-2 years. Landowners will also need enough time to absorb the implications of the heritage audit on future plans for their properties.

Once approved and endorsed by Heritage Western Cape, the final shapefiles underpinning the inventory will also be made available to the various levels of planning authorities (Local / Municipal, Provincial, National) that oversee future developments in the Cape Winelands.

5 CONCLUSIONS AND RECOMMENDATIONS

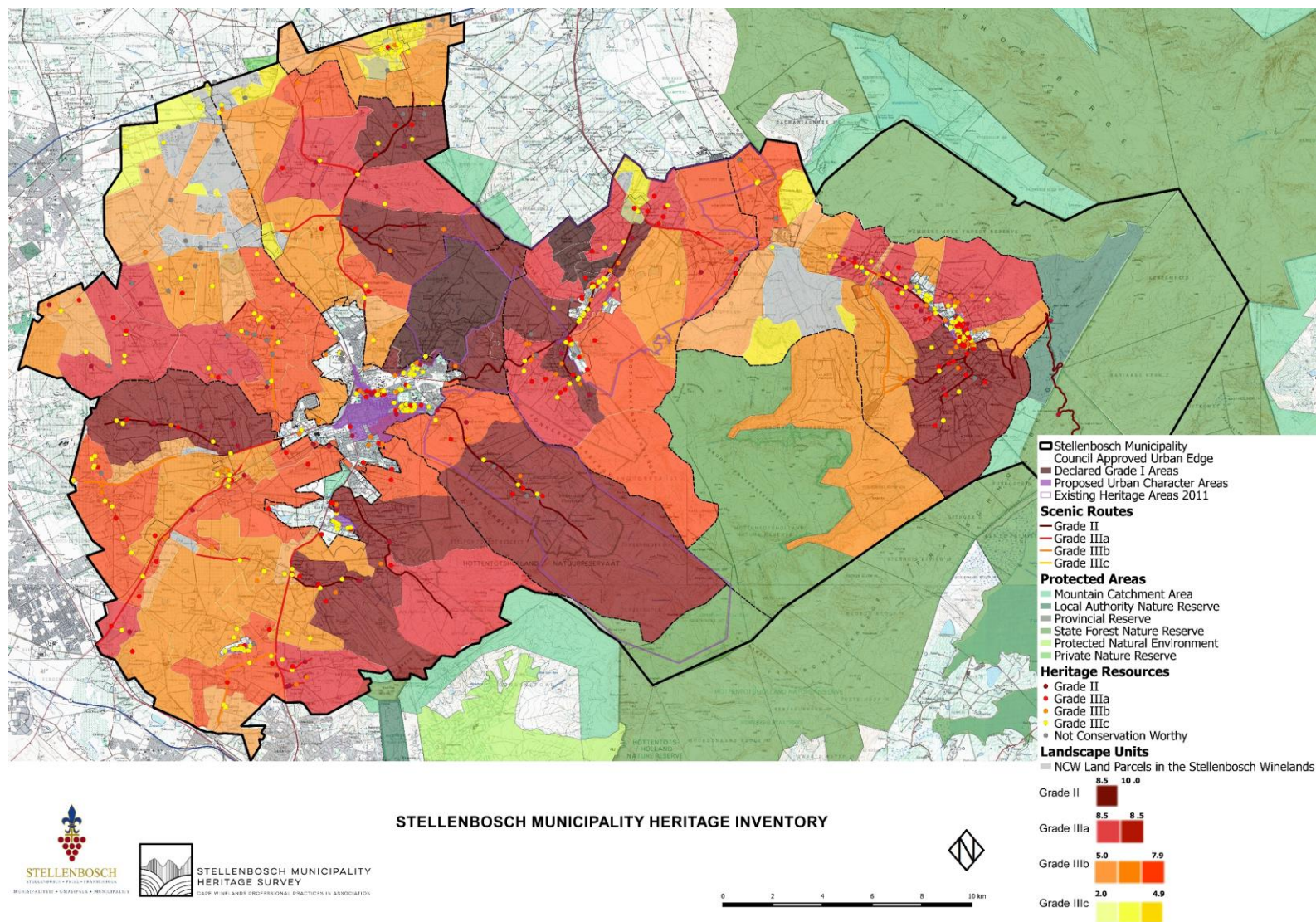


Figure 30: Stellenbosch Municipal Heritage Inventory Map

5.1 DRAFT STELLENBOSCH HERITAGE INVENTORY MAP

The revised Draft Stellenbosch Heritage Inventory Map (previous page: figure 30) is the culmination of the project as described in Sections 3 and 4. It is a graphic representation of the spatialised Heritage Inventory and is comprised of many layers and related shapefiles assembled in the project Geographic Information System (GIS) digital database.

Heritage resources are spatially dispersed across the domains of wilderness, rural and urban. They are identified and represented within the municipal area in three ways: as areas, as lines and as dots. As a consequence of the cultural landscape approach that we have argued for and adopted in this study, a considerable number of areas have been identified (represented by polygons): some areas are clearly identified as Not Conservation Worthy (NCW). Several scenic routes (represented by lines) cut across some of the areas and there are many individual heritage sites (the dots).

If conservation-worthy, each of the above, whether an area, a line or a dot, is coloured to indicate the proposed heritage significance thereof as set out in the map legend (with the exception of Protected Natural Areas). The level of significance is indicated within a descending scale from Grade I (national significance) and Grade II (provincial significance), through Grade IIIA, IIIB to IIIC (cascading degrees of local significance). In general, the convention is that the darker the colour tone, the more significant the heritage resource. In the case of Protected Natural Areas (all located within the wilderness domain), the key to the colours is found in the legend.

5.1.1 Eight major patterns may gleaned from the map (figure 30)

First, the major and 'framing' pattern of **mountain wilderness of high significance**, is derived from the very geology and major elements of the landform that prevail at the macro scale. This pattern relates mainly to the extensive arc of the sweeping mountain chain running from the Helderberg in the south-west to the mountains to the south and east of the Franschoek valley, which then encompasses the municipality to the north, as they merge towards the Drakenstein range beyond. This pattern is predominantly related to the Wilderness Domain. Associated with this macro-pattern are the Jonkershoek and Banghoek valleys and associated wilderness mountainscapes, as well as the 'cross-cutting' Simonsberg. These, in combination, have given us the two major river basins of the Berg and the Eerste Rivers.

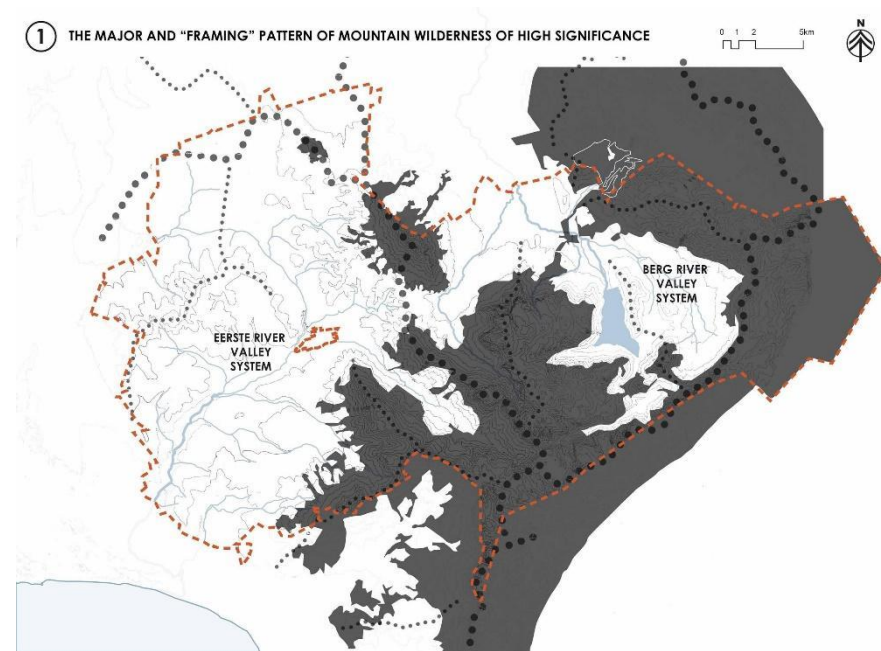


Figure 31: First pattern - mountain wilderness of high significance

Second, the pattern of **four distinctive clusters of high rural heritage significance**. This pattern predominantly relates to the Rural Domain. The first three are 'pinned-to', and are largely defined by, elements of the first 'framing' pattern:

- the areas associated with the Simonsberg, which already comprises two Declared National Heritage Sites (Grade I): Ida's Valley and the Founders Estate, located south-west and north-east of the Simonsberg, respectively;
- the areas associated with the Helderberg, Stellenbosch Mountain and Jonkershoek;
- the areas associated with the southern end of the Franschoek valley; and
- the fourth cluster that relates to portions of the Bottelary Hills.

In terms of geographic and landform definition, all of these clusters comprise elevated ridge-lines and the higher and intermediate slopes that

contain and define the enclosing 'walls' of the major valleys. Some contain a number of cul-de-sac subsidiary valleys (such as the Helderberg, Stellenbosch Mountain and Jonkershoek, Ida's Valley and other valleys to the south west of the Simonsberg). To varying degrees, the three clusters associated with mountains accommodate (or are traversed by) scenic routes. All four clusters contain significant heritage sites. This pattern of rural landscape clusters exemplifies high visual diversity and, in combination with wilderness areas at higher elevations, truly express a range of places and historic character with which the Stellenbosch Municipality is associated internationally and nationally. These landscapes are generally agriculturally productive, all are visually sensitive, affording expansive views over the surrounding valleys, while being very visible from lower elevations.

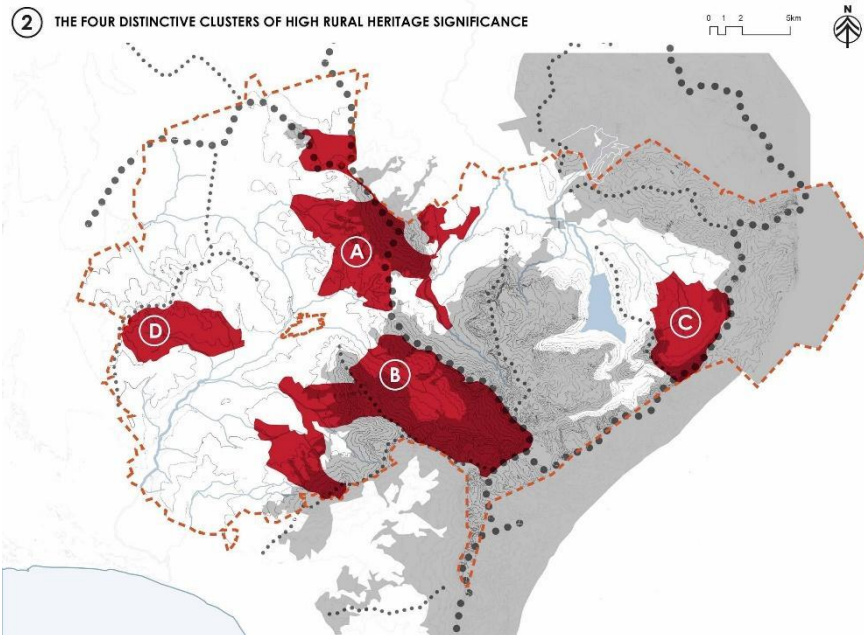


Figure 32: Second pattern - four distinctive clusters of high rural heritage significance

Third, the pattern of **intermediate rural heritage significance**, or the 'egg-white' situated around the 'egg-yolk'. Determined by the geography and landform, these rural areas comprise some of the lower mountain and hill slopes and foothills. Because of the greater ease of access to these areas, heritage elements within this pattern have been more prone to change and

compromise. Because of the undulating terrain, many of the landscapes are visually exposed, accessible and significant.

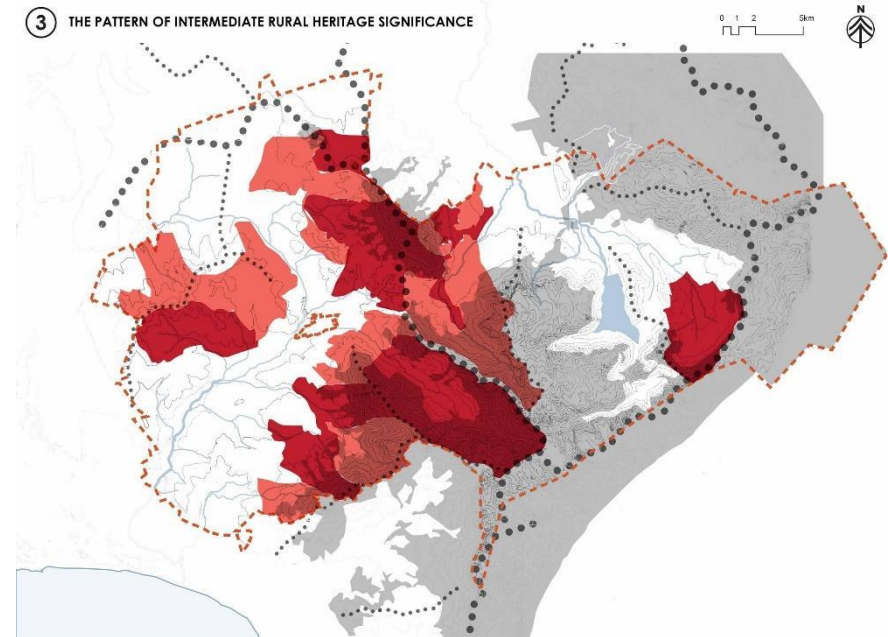


Figure 33: Third pattern - intermediate rural heritage significance

Fourth, the pattern of **farmsteads and settlement in the valley bottoms**, which correlate with access routes, many of which are scenic routes. They are the locus of many heritage resources, often in a string-like pattern along the particular valley floor located not far from a stream or river, and have been subject to the most pressures for change,

Fifth, in the relatively flat Klapmuts and the Berg River valley bottom areas (to the west of La Motte in the Franschoek Valley), there are patterns of **relatively low heritage rural landscape significance**. These areas have been subjected to a variety of infrastructural interventions, such as rail lines and nodes, quarries, dams and the like.

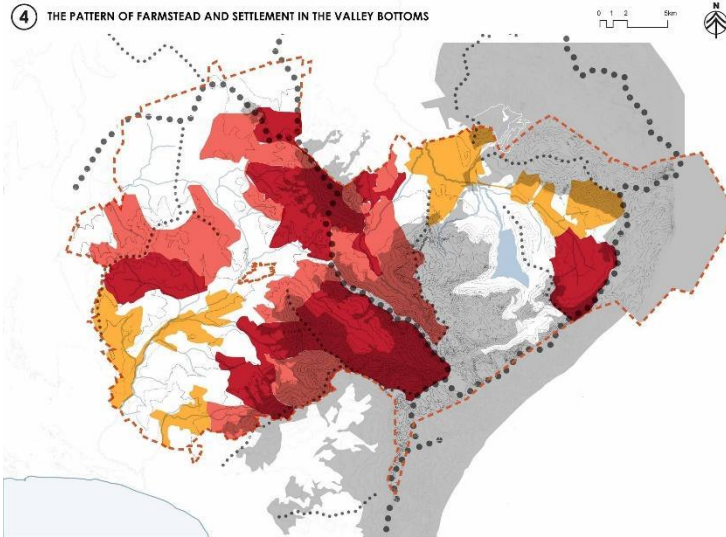


Figure 34: Fourth pattern - farmstead and settlement in the valley bottoms

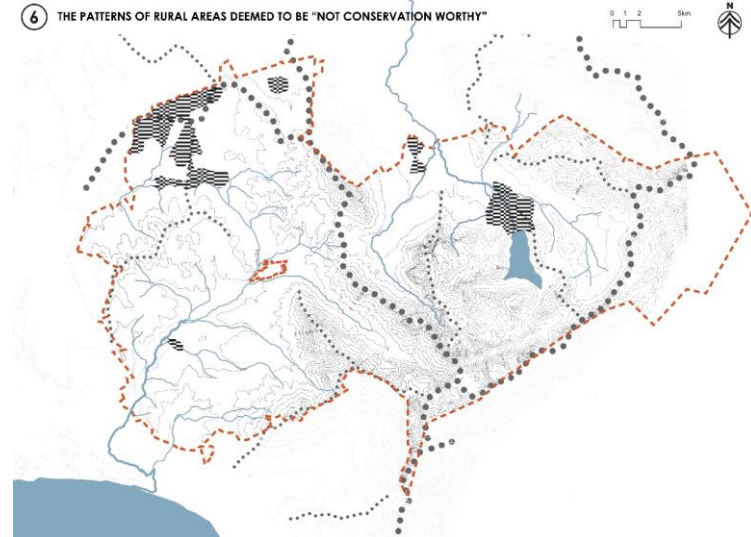


Figure 36: Sixth pattern – Not Conservation Worthy

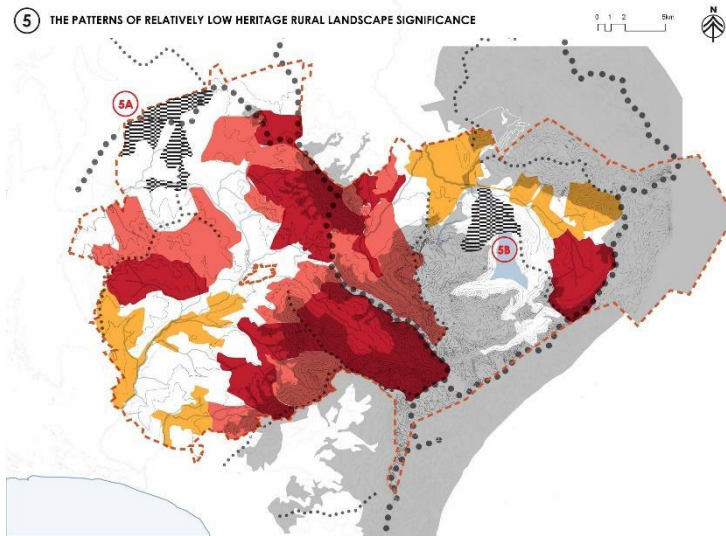


Figure 35: Fifth pattern - relatively low heritage rural landscape significance

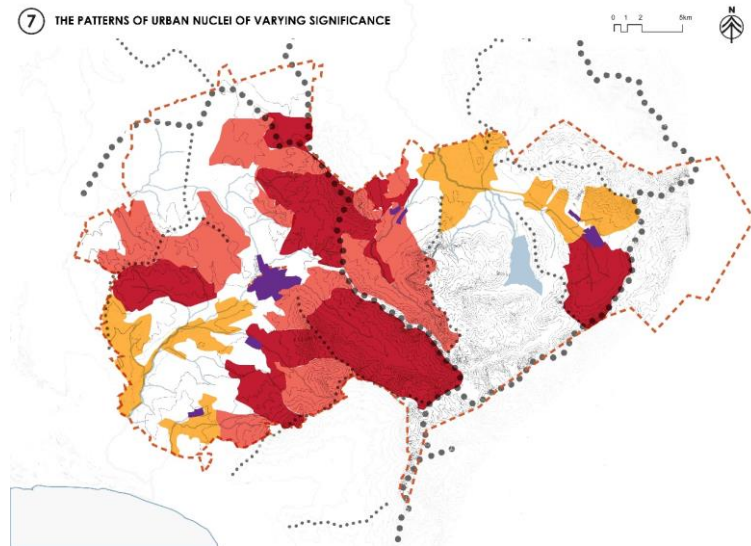


Figure 37: Seventh pattern - urban nuclei of varying significance

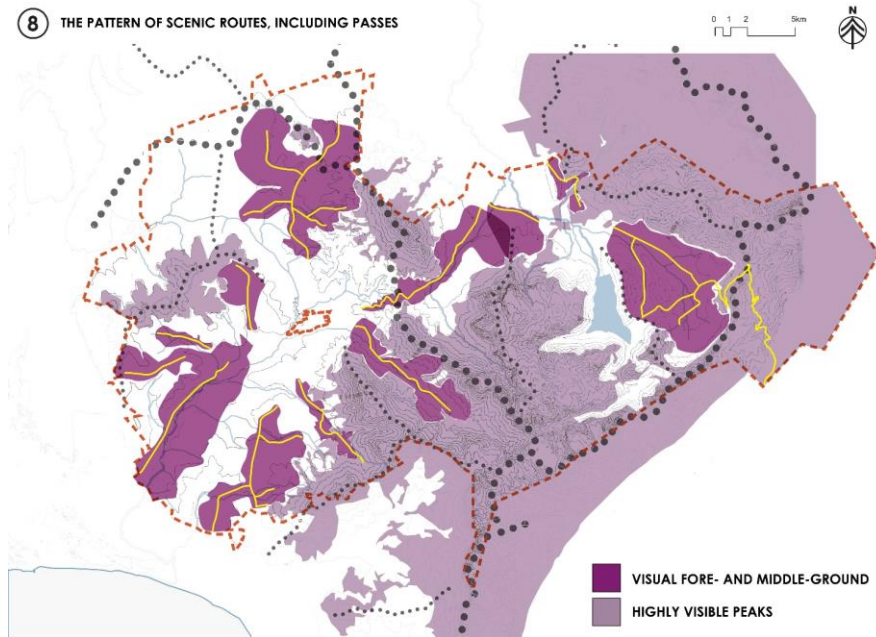


Figure 38: Eighth pattern - scenic routes

Sixth, and associated with the fifth pattern, because of a variety of factors, there are rural areas identified as not conservation worthy (NCW).

Seventh, the patterns of **urban nuclei of varying significance**, mainly associated with favoured places along stretches of valley bottoms, or at, or near, the confluence of streams and rivers and the network of routes. The historic towns of Stellenbosch and Franschoek are complemented by a considerable number of other smaller nucleated settlements, some more historic than others.

Eighth, the pattern of **scenic routes** inclusive of mountain passes. This is a significant pattern because it is how most of us experience the many landscapes of the Stellenbosch Municipality.

5.2 THE PUBLIC PARTICIPATION PROCESS

The project has aimed to be as inclusive as possible. Over many months we have engaged in a **public participation process** (reported on in Appendix 2 and Appendix 3) which has helped the project team to include heritage resources in the Heritage Inventory that we might otherwise have missed. The process moreover has required that the Report and the Inventory were made available to the Stellenbosch Municipality, to conservation bodies registered with HWC, and to the general public, for a 30 day review and comment period (ending 6th April 2018). All comments received have been considered, the inventory and report have been revised as necessary, and all the documentation (including the digital data) will be submitted to HWC early in May for their consideration and approval. That will constitute the end of Phase 3 of the project.

As previously stated in this report, the Heritage Inventory Map and all pertinent information is hosted on the Stellenbosch Heritage Foundation website: www.stellenboschheritage.co.za/

5.3 PROSPECTIVE PHASE 4 WORK

During the course of May 2018 we will commence work on Phase 4 of the project: the preparation of a draft Conservation Management Plan. This will require appropriate interpretation of the spatialised heritage resources, in parallel with the most significant development informants.

Indeed, we foresee that the Management Plan will develop and propose a hybridised spatial plan that mediates between heritage and development. It is likely that such a plan will require some up-dating and slight modification to the Heritage Inventory here proposed.

Figure 38 gives an idea of the spatial spread and pattern of the highest concentrations of heritage resources significance that development considerations will have to take into account appropriately.

We envisage that the Management Plan and the revisions to the Heritage Inventory necessitated thereby will be submitted to HWC in due course, probably in August 2018.

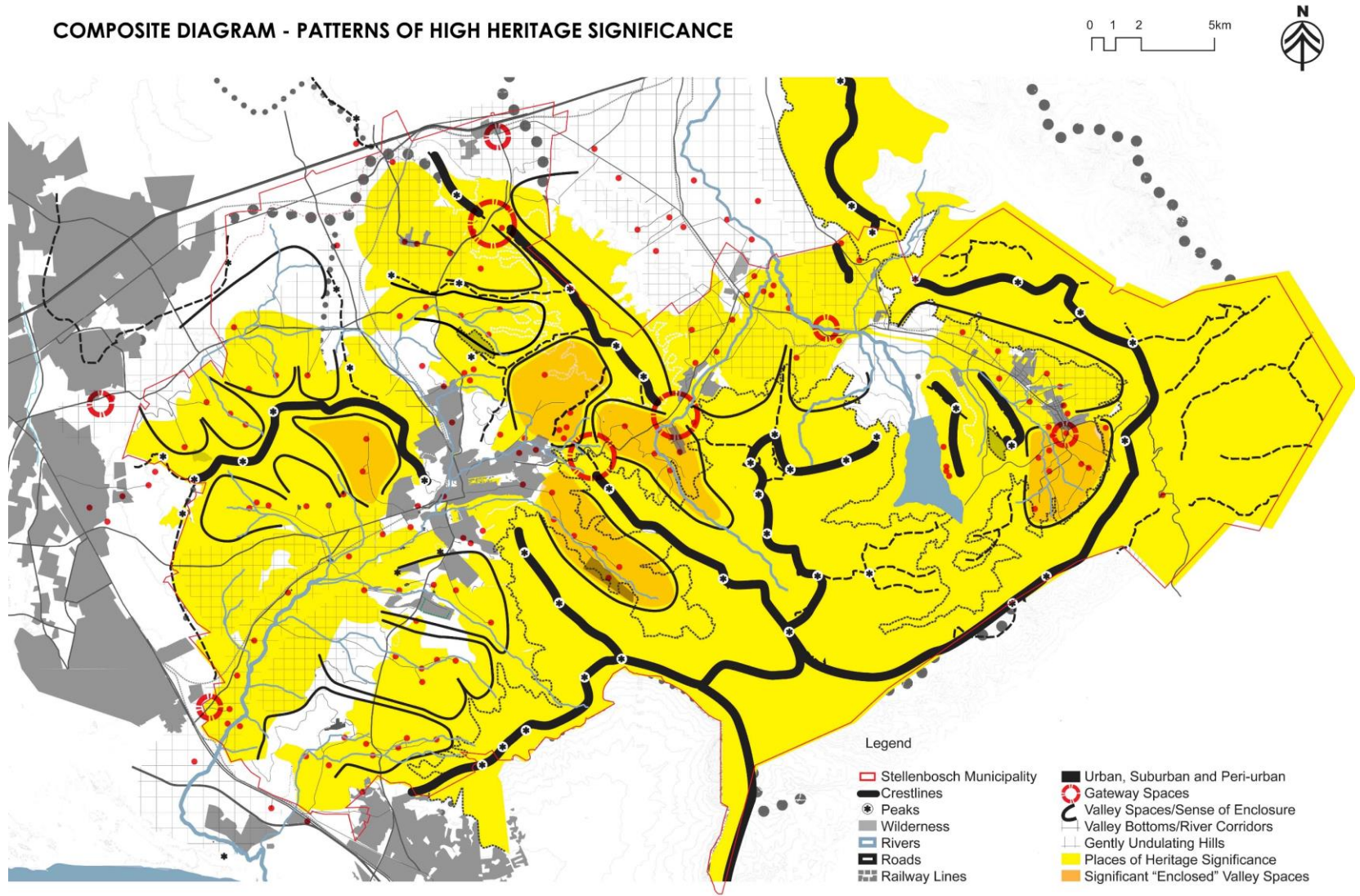


Figure 39: Composite Diagram – the patterns of high heritage significance within the study area

5.4 RECOMMENDATIONS

The recommendations of this report are that:

1. The methods articulated and employed in the study be supported and accepted as rational and sensible by HWC;
2. Because the Phase 2a inventory (HWC previously approved) was confined to rural areas of the municipality, and the inventory has now been substantially expanded and updated, HWC should replace the Phase 2a inventory once the Phase 3 documents are approved.
3. The Phase 3 report and inventory, as reflected in the Stellenbosch Heritage Inventory Map (figure 30) and the related schedules, be accepted and approved by HWC, inclusive of the proposed significance and heritage grading.
4. The specifics of the construction of the digital heritage inventory are accepted and approved by HWC as promoting and facilitating future updates.
5. In principle, the proposition that Heritage Areas be adopted as a vehicle for the appropriate management of landscape and townscape areas in the municipality be accepted and approved, requiring appropriate liaison between HWC and the Stellenbosch Municipality, so that the necessary regulations may be framed and enforced in due course. Moreover, the 'doubled up' nature of protection (set out in Section 3.3.2) means that Grade I and Grade II sites can be protected by the local authority as Heritage Areas.
6. HWC takes note that a proposed Draft Heritage Resources Management Plan will be formulated as part of the Phase 4 work and that it may lead to some amendments (additions, deletions and possible spatial reconfiguring of Areas) to the Heritage Inventory here proposed as a culmination of Phase 3 work. In that event, the Management Plan will be submitted to HWC for approval, probably sometime during August 2018.
7. The municipality takes clear and explicit note of the contents and features of the heritage inventory as basic informing parameters and constraints to all aspects of development planning.
8. The Urban Edges as depicted in the Heritage Inventory Map (figure 30) be accepted by the Stellenbosch Municipality. This will require amendments to the ones currently approved and in force. Particularly in Franschhoek, we have noted current construction of new dwellings in open areas which were previously considered very significant as the interface between the La Cotte farmland and the urban area. We remain of the view that these developments constitute a serious error because of the Urban Edge having been moved to a completely inappropriate position: see our comments provided during 2017 in Appendix 6
9. The municipality import the GIS datasets of the project and that they form part of the information database of the Stellenbosch Municipality.
10. The public online Heritage Inventory map should be placed on the Stellenbosch Municipality website.
11. Appropriate municipal officials be appointed and selected for training (during Phase 5 of the project) so that they may be instrumental in maintaining and updating the heritage inventory and can act as the vital operational link between the responses to development applications across heritage resources management and development planning organs of the municipality.

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APPENDIX 1

Historical Spatial Framework by Dr Antonia Malan

APPENDIX 2

Public Participation Description by Shawn Johnston

APPENDIX 3

Comments and Response Report on the: Phase 2b Report

APPENDIX 4

Townscape Character Assessment

APPENDIX 5

Landscape Character Assessment

APPENDIX 6

Comment on the Proposed Amendments to the Stellenbosch SDF. 28 April 2017

APPENDIX 7

Response to Western and Eastern Bypass in terms of Heritage. 5 October 2017

APPENDIX 8

Interim Comments on: NATIONAL DEPT. OF AGRICULTURE PROPOSED EXCLUSION OF CERTAIN PROPERTIES FROM THE PROVISIONS OF THE SUBDIVISION OF AGRICULTURAL LAND, ACT, ACT 70 OF 1970. 27th March 2018

APPENDIX 9

Heritage Sites Inventory