

HERITAGE INVENTORY OF, AND MANAGEMENT PLAN FOR, THE TANGIBLE RESOURCES IN THE STELLENBOSCH MUNICIPALITY PROJECT¹

Prepared by

CAPE WINELANDS PROFESSIONAL PRACTICES IN ASSOCIATION²

26 January 2017, being revision (after receiving comments) of the 14 November 2016 original report

PHASE 2a REPORT

PRELIMINARY DRAFT HERITAGE INVENTORY OF LARGE-SCALE LANDSCAPE AREAS IN THE RURAL DOMAIN OF THE STELLENBOSCH MUNICIPALITY INFORMING PROPOSED HERITAGE AREAS



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

² Cape Winelands Professional Practices in Association (Pty) Ltd (Directors: Fabio Todeschini and Liana Jansen).

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In Brief

This report embodies the preliminary draft identification of significant large-scale heritage resources in the rural domain of the Stellenbosch Municipality. It has been prepared so as to assist the municipality to become compliant with the requirements of the National Heritage Resources Act (NHRA) as soon as possible. Heritage informants are an obligatory component of current and future proposals for and amendments to urban settlement and development planning instruments, spatial development frameworks, transportation plans and the like.³

The original report was lodged with Heritage Western Cape (HWC) and South African Heritage Resources Agency (SAHRA) on the 14th November 2016. The Act also requires comment on the draft inventory of heritage resources from the municipality and from the three conservation bodies that have been constituted within the municipal area and that are registered with HWC. The report was therefore made available to them with the invitation to comment thereon by the 14th December 2016. Comments have been received and this revised report is submitted to HWC for their approval, as required by the NHRA.

Since formulating and issuing the original Phase 2a report in mid-November last, there have been two significant developments on the project. Firstly, considerable reflection and discussion have taken place within, and among, the members of the project team concerning the core linkage between heritage significance and practicable management of heritage resources (large areas, in particular). Amongst other reasons, these discussions were prompted by the realization that the NHRA refers to Heritage Areas as related expressly and only to resources of Grade III significance, whereas we had interpreted the concept as spanning all possible Grading of heritage resources. This has led us to reshape the conceptual framework in these respects, so as to have proposals about Heritage Areas that are more suitable and practicable over what appeared in the original Phase 2a report. It has become increasingly clear to us that our prior proposals relating to extensive Grade I and Grade II Areas (because of

high heritage significance) would not lead to practicable and effective management. While the revisions retain the assignment of high heritage significance, all Heritage Areas that are here proposed conform to the NHRA and are Grade III. Secondly, the many comments received have been appreciated, have been extensively discussed within the project team and have led to some revisions included in this report.⁴ Overall and in our view, this revised Phase 2a report is a significant improvement over the original.

The report sets out why and how this preliminary draft heritage inventory (focussed on the rural domain of the municipal area) has been prepared at this time. In conclusion, information is provided about how this inventory is to be amplified and inserted into the fuller and more complete inventory of heritage resources for the balance of the municipal area. This work will be concluded by the end of July 2017.

All interested parties are encouraged to participate in the project and make contributions as they see fit in the broad public interest. To that end, relevant documentation has been placed, and will continue to be available as the project unfolds, on the website of the Stellenbosch Heritage Foundation:

<http://www.stellenboschheritage.co.za/cape-winelands-heritage-survey-2>.

Acknowledgements

We want to thank the Stellenbosch Heritage Foundation for kindly extending the use of their website for making available various documents on the project to the interested public. We also want to thank the many persons who participated in 'focus group meetings' held during August 2016, as well as the numerous farmers and others who have engaged with us during fieldwork over the past months and weeks: we have learned a great deal from them. Finally, we wish to thank: our core team members Ms. Claire Abrahamse and Mr. David Gibbs; and our consultants Dr. Antonia Malan, Ms. Tracey Randle, Ms. Jenna Lavin, Ms. Kyla Bluff and Mr. Shawn Johnston for their contributions.

All photographs included in the report are by Fabio Todeschini.

³ 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.

⁴ The schedule of comments received by the 14th December 2016 appears at Appendix 5.

1. BACKGROUND AND INTRODUCTION

The Stellenbosch Municipality awarded a project entitled 'Heritage Inventory of, and Management Plan for, the Tangible Heritage Resources in the Stellenbosch Municipality'⁵ to the Cape Winelands Professional Practices in Association (Pty) Ltd towards the end of 2015. The lead practitioners are Prof. *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 to the lead practitioners are: *Claire Abrahamse, Architect, Urban Designer, Heritage Practitioner*; *David Gibbs, Architect and Landscape Architect*; *Antonia Malan, Historical Archaeologist*; *Tracey Randle, Historian*; *Jenna Lavin and Kyla Bluff*, of Cedar Tower Services, dealing with all GIS⁶ matters; 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 and submitted to the municipality in April 2016 and has been available to the interested public at large via the website of the Stellenbosch Heritage Foundation: (<http://www.stellenboschheritage.co.za/cape-winelands-heritage-survey-2>).

Further documentation on the project is available there (including 2-page project 'flyers' in English, Afrikaans and Xhosa).

The Stellenbosch municipal area 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 adaptations that have resulted over centuries comprise many very positive landscape and settlement layers, as well as some negative intrusions thereon. This project seeks to conserve and manage the positive aspects, to mitigate the negative aspects and to help to provide a basis for appropriate future development with due regard to this inheritance. Whereas the project study area excludes the core of the town of Stellenbosch – as this portion of the municipal area has already been subjected to heritage inventories approved by Heritage Western Cape (HWC) – it includes the remainder of the town and municipality (incorporating most of the Eerste River and

Franschhoek Valleys, the Bottelary Hills and the related rural areas and settlements).

The geographic area that is the subject of study for this project is shown in Figure 1, as is the Rural Domain focus of this Phase 2a.

Preparatory work on the project commenced in January 2016 and seven 'focus-group' meetings were held with interested and affected parties (I&APs) during August 2016. The presentation prepared for those meetings is available on the Stellenbosch Heritage Foundation web-site.

The following are excerpts from our April 2016 Phase 1 Report, so as to orientate any new reader:

"It is common cause that an appropriate heritage resources inventory and a related management plan are essential - for two main reasons. The first is that surviving heritage resources and their significances are properly identified and managed in the broad and long-term public interest: in accordance with the National Heritage Resources Act (25 of 1999), as well as in terms of the aims of the Stellenbosch Municipality and of affected communities and interested groups. The second reason is so that current and future development needs (considered at various scales and time-frames) may be shaped effectively, with due regard to significant heritage resources that have endured and that should be respected for the common good.

The territorial geographies that spatially define these settled landscapes and domains, together with the cultural histories that have 'clothed' and produced them over the centuries, have been and continue to be complex and nuanced. Consequently, the preparation of the heritage inventory and the related management plan have to be approached in a sensible, well-informed and practical way, based on international best-practice as well as prevailing law. With this in mind, the main features of the project include:

- *The recording of all (tangible) heritage resources through necessary survey fieldwork and the entry of all relevant and appropriate information into a digital Geographic Information System database;*
- *The compilation and delivery of an updated electronic heritage resources inventory, inclusive of proposed significance gradings, open to the municipality and*

⁵ Excluding those portions of the municipal area for which Heritage Inventories have already been submitted to, and approved by, Heritage Western Cape.

⁶ Geographic Information Systems (electronic and digitised).

available to the public via the existing Stellenbosch Heritage Foundation website

(www.stellenboschheritage.co.za);

- The undertaking of all public consultations that are required and that can add value to the project, to be facilitated by Sustainable Futures ZA as consultant (swjohnston@mweb.co.za);
- The derivation of an assessed monetary value of the heritage tourism potential within the area;
- The preparation of strategic spatial proposals relative to identifying 'no-go' development zones as well as possible development zones, as defined by heritage resources criteria and considerations by the core team;
- Liaison with the municipality and representatives of the parallel planning project: BSM 63/15 "Rural Area Plan for Stellenbosch", so that heritage considerations will feature sufficiently in both the projects;
- The strategic formulation of a heritage resources management plan;
- The submission of the heritage inventory and the management plan to Heritage Western Cape for approval;
- The training of municipal staff for familiarisation with the data and the decision-making implications of it, in order to enable effective decision-making with respect to heritage resources and their implications for development applications and municipal planning.

Naturally, this kind of project requires the participation of the interested and affected public. We therefore invite all interested individuals and groups to register with Sustainable Futures ZA, so that they may be consulted and kept informed of progress on the project (application forms are available on the

<http://www.stellenboschheritage.co.za/cape-winelands-heritage-survey-2> website)."

The heritage resources to be found in the Stellenbosch municipal area are significant both nationally and internationally. This was underscored in 2009, when the Cape Winelands was placed on the UNESCO Tentative List

of World Heritage Sites. The following is an excerpt from that Nomination Dossier:⁷

Box 1 Justification of Outstanding Universal Value

The Cape Winelands is an outstanding example of a cultural landscape enriched by influences accumulated from four continents (Africa, Asia and the East Indies, Europe and Northern America), natural elements ideally suited for viticulture and situated in a dramatic environment where a unique vernacular architecture developed. With its vineyards, orchards and fields and farmsteads, cellars, villages and towns, including the oldest city in South Africa nestling on the slopes of the Cape's mountains or on the plains along water courses, the Cape Winelands illustrate the impact of human settlement, slave labour and agricultural activities, and more specifically the production of the Cape wines, since colonialization in the mid 17th century on the natural landscape.

Criterion (ii): The Cape Winelands as a continuing cultural landscape, exhibits an important interchange of human values and retains an active social role in contemporary society associated with the traditional way of life of the wine industry, and in which the evolutionary process is still in progress, as is illustrated in the developments towards the end of the 20th century. At the same time it exhibits significant material evidence in the development of Cape vernacular architecture and the formation and development of a cultural landscape design in the evolution of the economic development thereof over time.

Criterion (iii): The Cape Winelands cultural landscape bears an exceptional testimony to a cultural tradition, which is living and evolving. This includes the development of a new indigenous language, i.e. Afrikaans. The Cape Winelands cultural landscape illustrates the impact of human settlement and agricultural activities and more specifically the production of the Cape wines over a period of more than 360 years on the natural landscape.

⁷ UNESCO (2009) Tentative List South Africa, accessed online: <http://whc.unesco.org/en/tentativelists/5455/>. The criteria referred to are by UNESCO.

Criterion (iv): A unique Cape vernacular architecture developed through the contributions from the available building materials, settlement patterns and cultural interaction between people of diverse cultural backgrounds, such as European settlers, slaves from the East Indies and the Indian subcontinent and Africa and indigenous Khoikhoi.

Criterion (v): The Cape Winelands cultural landscape illustrated the evolution of a human society, land-use and settlement over time, under the influence of and in interaction with the physical constraints and opportunities presented by the natural environment and of successive social, economic and cultural forces that were moulded here from four continents.

Therefore, it is clear that the generic Cape Winelands comprises cultural landscapes that warrant conservation. This has been further underscored by the SAHRA Council's Declaration of 'Ida's Valley' (which was protected as a heritage resource since 1976)⁸ and the 'Founders' Estate' as National Heritage Sites. According to a recent publication on the Landscapes of South Africa,⁹ Ida's Valley typifies both the glory and the tragedy of South African history, since the valley was home to San hunter-gatherer and Khoi herder populations before European colonists forcibly displaced or enslaved them, from 1682 onwards. There is evidence of human landscape modifications over extended periods in response to historical factors that have influenced agriculture in the region.

Moreover, the study area falls within The Cape Winelands Biosphere Reserve (CWBR), an internationally-proclaimed area located within the Cape Floral Kingdom in South Africa (a formally declared UNESCO Serial World Heritage Site). It was demarcated in accordance with the Western Cape Provincial government's bioregional approach, which 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. In the CWBR, the core area comprises provincial and local authority nature reserves as well as a private nature reserve (Elandsberg). It includes areas such as the Hottentots Holland, Jonkershoek, Limietberg and Jan Marais Nature

Reserves. Buffer zones include mostly natural areas that are registered as private nature reserves or are included in private conservancies, such as the Bottelary and Greater Simonsberg Conservancies.¹⁰

The original Phase 2a report was lodged with HWC and SAHRA on the 14th November 2016. Because the NHRA also requires comment on the draft inventory of heritage resources from the municipality and from the three conservation bodies that have been constituted within the municipal area and that are registered with HWC, the report was made available to them with the invitation to comment thereon by the 14th December 2016.¹¹ Comments have been received and this revised report is submitted to HWC for their approval, as required by the NHRA.

Since formulating and issuing the original Phase 2a report in mid-November last year, there have been two significant developments on the project: on the one hand, we have reshaped our thinking relative to the identification and effective management of extensive areas comprising heritage resource; on the other, we have responded to many comments, including the desirability of having Grade III Heritage Areas managed by the municipality in terms of the Zoning Scheme, or by HWC should there be lapses. These developments are briefly set out sequentially below.

Firstly, since mid-November last year and after careful reflection, considerable discussion has taken place among members of the project team concerning the core linkage between heritage significance and practicable management of heritage resources — large areas, in particular, such as we have identified in the Rural Domain of the Stellenbosch municipal area. Inter alia, these discussions were prompted by the realization that the NHRA refers to Heritage Areas as related expressly and only to resources of Grade III significance, whereas we have held the concept as spanning all possible Gradings. However, because the NHRA requires sites of Grade I to become National Heritage Sites and sites of Grade II to become Provincial Heritage Sites, and because such sites can only then be managed in terms of Section 27 of the Act (case by case and requiring permit applications for any and every change proposed within that area), this legislative provision is

⁸ Pistorius and Todeschini (2004). For decades, the whole of Ida's Valley was a declared National Monument.

⁹ Meadows, ME (2015).

¹⁰ Cape Winelands Biosphere Reserve. (2016). Location and Extent. Available online at: <http://capewinelandsbiosphere.co.za/biosphere-reserve/location-extent>

¹¹ The conservation bodies are: the Stellenbosch Heritage Foundation; the Stellenbosch Interest Group; and the Franschoek Valley Trust and Ratepayers' Association. The deadline date of 14th November 2016 for submission was due to time requirements flowing from the target meeting of the statutory HWC IGIC committee of February 2017.

cumbersome and impractical to our common purpose.¹² So, this has led us to reshape the framework in these respects (dropping the use of Section 27, while retaining the reference to Section 31 of the Act: the very section that relates to Heritage Areas and facilitates effective proposals). As may be seen, the revisions retain the assignment of high heritage significance, but now in this revision, all Heritage Areas proposed conform to the NHRA and are Grade III. Heritage Areas are to be managed by the Local Authority (where possible, if not by the Local Authority, then by HWC) and are used to protect "any area of environmental or cultural interest" using appropriate guidelines developed to conserve the area's sense of place.

Secondly, the many comments received have been appreciated, have been extensively discussed within the project team and have led to some revisions included in this report.¹³

Overall and in our view, this revised Phase 2a report is a significant improvement over the original, aimed at Local Authority (Stellenbosch Municipality) management of extensive areas comprising heritage resources in the Rural Domain, while HWC (the Provincial Heritage Authority) may step-in should there be lapses in municipal management of the heritage resources.

Phase 2 of this project, concerned with the identification of heritage resources through a variety of means (including extensive field survey), was scheduled to commence in May 2016 and conclude at the end of February 2017. However, because we wish to help the Stellenbosch Municipality become compliant with the requirements of the NHRA as soon as possible, at a 'projects co-ordination meeting' called by the municipality on the 1st September 2016, we suggested the following:¹⁴

"The National Heritage Resources Act (Act 25 of 1999) (NHRA) required all municipalities to undertake up-dated inventories of the heritage resources in the area of their jurisdiction within 10 years of the promulgation of the Act (Sect. 9(3)(c)). Moreover, such Heritage Inventory is specifically required, in terms of Sect. 30(5), of the NHRA:

"At the time of the compilation or revision of a town or regional planning scheme or a spatial development plan, or at any

other time of its choosing, or at the initiative of a provincial heritage resources authority where in the opinion of a provincial heritage resources authority the need exists, a planning authority shall compile an inventory of the heritage resources which fall within its area of jurisdiction and submit such inventory to the relevant provincial heritage resources authority, which shall list in the heritage register those heritage resources which fulfill the assessment criteria ...".

Procedurally, we are thus required to prepare a draft Inventory of Heritage Resources currently extant in the Stellenbosch municipal area and submit it to HWC for their approval and inclusion in the Heritage Register of all Grade II and Grade III heritage resources in the province (Sect. 30). We are also required to submit an inventory of any proposed Grade I heritage resources to the South African Heritage Resources Authority (SAHRA), for their approval. As may be seen from our Phase I report, we had planned to conduct the work over five phase, as follows:

- *Phase 1: Initiation and Planning* - January to end April 2016
- *Phase 2: Survey and Inventory* - May 2016 to Feb. 2017
- *Phase 3: Inventory Report* - March to Sept. 2017
- *Phase 4: Management Plan* - October to April 2018
- *Phase 5: Municipal Staff Training* - May to July 2018



¹² FT and LJ record their thanks to Jenna Lavin, who made significant contributions in this regard.

¹³ The schedule of comments received by the 14th December 2016 appears at Appendix 5.

¹⁴ Our email to Dupre Lombard and 'Bernabe' de la Bat dated 6th September 2016.

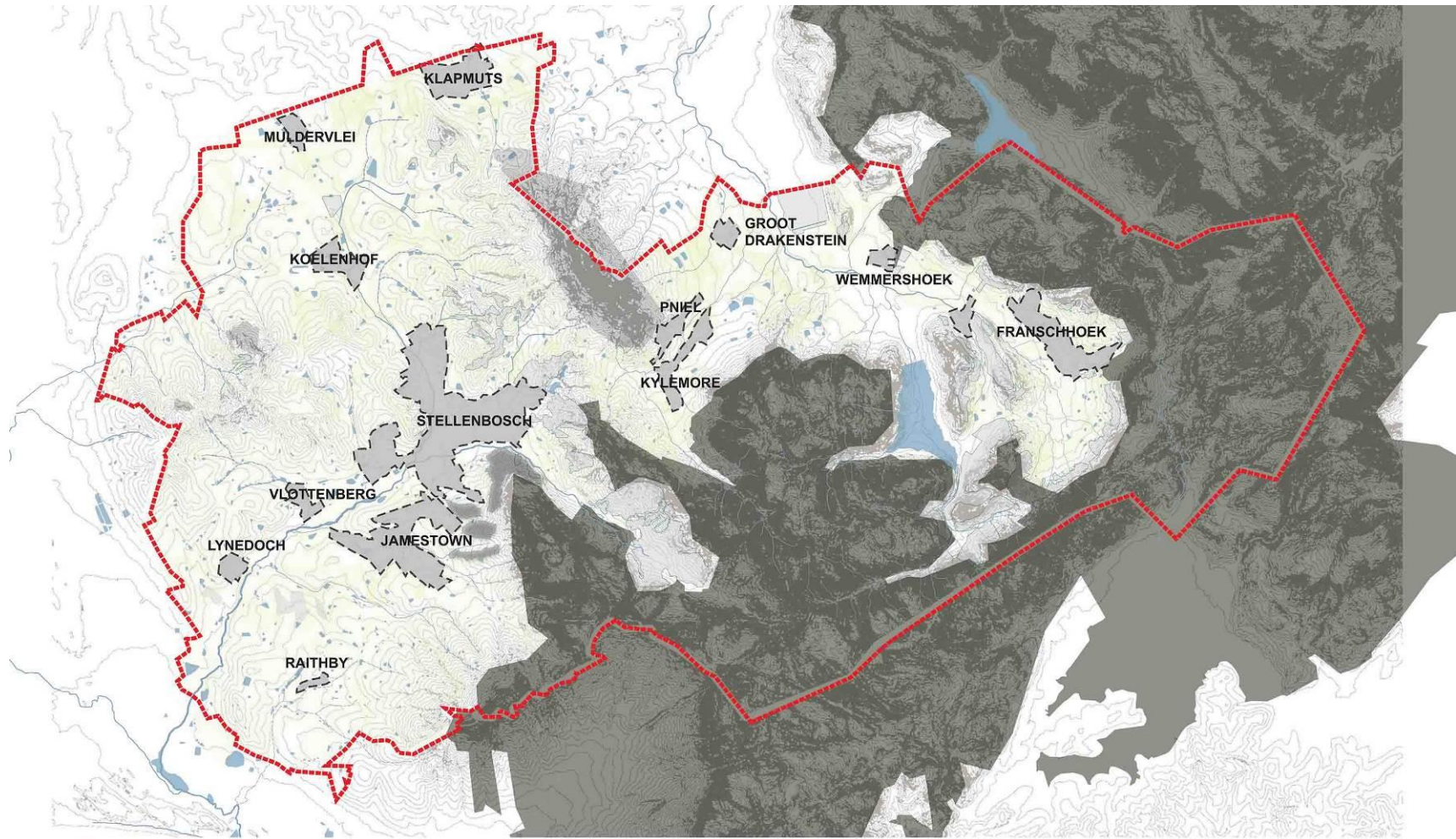






Figure 1



STUDY AREA AND DOMAINS

Legend

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

However, ... [following the mentioned meeting], it has become apparent that some adjustment to our phasing of work on the project is essential if the municipality is to be compliant with the NHRA as soon as possible and before it embarks on finalising amendments to any statutory planning, because of deadlines related to the adoption of relevant Spatial Development Plans, and the like, by June 2017.¹⁵

Therefore, we are now proposing that the Survey and Inventory phase of the project (Phase 2) be somewhat restructured and lengthened in terms of the time frame, so as to facilitate:

- Phase 2a focussed on identifying (survey and inventory of) large-scale heritage rural landscape areas (No-Go development areas), since these could most significantly affect any possible modification of the current urban edge and of current rural (agriculturally zoned) areas being potentially considered for conversion to urban; and
- Phase 2b aimed at completing the rest of the Heritage Inventory.

The revised phasing would, therefore, be as follows, and would depend on HWC's approval of the proposal to lodge the Heritage Inventory as indicated above in two tranches, necessitated by the strategic imperatives the municipality faces:

- Phase 1: Initiation and Planning - January to end April 2016;
- Phase 2a: Survey and Inventory - May 2016 to end February 2017;
- Phase 2b: Survey and Inventory - March 2017 to end July 2017;
- Phase 3: Inventory Report - August to end November 2017;
- Phase 4: Management Plan - December 2017 to April 2018;
- Phase 5: Municipal Staff Training - May to July 2018."

We met with HWC officials with a view to properly liaising on the matter of lodging the Heritage Inventory in two tranches, and they approved

the proposal.¹⁶ Hence this report on the 'Preliminary Draft Heritage Inventory of Large-Scale Scenic Landscape Areas in the Rural Domain of the Stellenbosch Municipality'.

The rest of this report is structured as follows: Section 2 sets out the main features of the method we have utilised in undertaking and preparing this preliminary heritage inventory in accordance with international and national best practice and South African law. Sections 3 and 4 identify and briefly describe the map sequence that embodies relevant informants across the 'natural' layers and the 'cultural' layers, as well as the syntheses maps and the development sequence spanning 1935 to 2010 (with occasional reference to the specialist reports of Dr. Antonia Malan and Tracey Randle). Section 5 brings the various threads together and identifies the proposed Heritage Areas as part of the Preliminary Draft Heritage Resources Inventory Schedule for the Rural Areas of the Stellenbosch Municipality. Section 6 sets out our recommendations and the way forward for the project.



¹⁵ The deadline date of the 14th November 2016 for submitting this report is due to time requirements flowing from the target meeting of the statutory HWC IGIC committee in February 2017.

¹⁶ We met with Ms. Colette Scheermeyer and Mr. Jonathan Windvogel (relevant officials of HWC) on the 8th September (see e-mail confirmation from Ms. Colette Scheermeyer).

2. METHOD: OVER-ARCHING CONSIDERATIONS AND APPROACH

First off, we remind the reader that this sub-phase of our work has materialised in an unexpected way (in terms of the Phase 1 Report), consequent on our desire to help the Stellenbosch Municipality to become compliant with the NHRA as soon as possible. This fast-track sub-phase has been aimed at producing preliminary findings and proposals (inclusive of comments thereon) to be lodged with HWC during January 2017. Development planning work on the part of municipal officials and other consultants may then proceed in compliance with several statutes. The main implications for our method has been that we have had to find some 'short-cuts' in coming forward with our preliminary recommendations. We have been at great pains to ensure that even in this context we have been systematic in marshalling and inspecting the critical evidence sufficient to come to appropriate proposals.

Having strategically premised our approach as above, we now present and discuss a major conceptual shift that has occurred internationally in heritage resources studies and management in recent decades. This has influenced and redefined the method and criteria that are central to determining heritage significance.

For most of the last century the dominant heritage conservation approaches utilized internationally tended to focus on starkly defined and catalogued 'monuments' (be they individual buildings, historic sites or building complexes).¹⁷ Moreover, there tended to be an utter divide in consideration between 'natural' and 'cultural' phenomena. Over the past three decades, however, those approaches have been found to be wanting in many respects. Firstly, because people and culture are systemically connected to, and interdependent with, nature, a more unified approach is necessary. Secondly, by focusing on the 'highest' and 'best', the approaches tended to be elitist and failed to contextualize and properly 'ground' the selected elements of the inheritance, socially, economically and in other respects. A more nuanced approach, which more inclusively reflects

all fractions of society and their habitat, past and present, is therefore necessary.

An inevitable consequence has been a shift in focus from individual 'building-objects' and sites, to areas—or even to entire landscapes. Cultural landscape and landscape study and enquiry have consequently flowered and have increasingly been the subjects of very many international and local workshops and conferences. Essentially, the argument is that heritage significance does not only reside within historically valuable structures, assemblages thereof, or individual sites, but is also within the larger landscapes that are the settings for all these elements.

Simply speaking, the 'canvas' that defines the subject of study has been spatially expanded very substantially. In recent years, it has been increasingly argued that the appropriate methods employed to identify, assess and document heritage significance of such multi-faceted and diverse landscapes should be inclusive and occur at a number of scales. This idea rejects the divisions that for long have dominated academia and practice in South African environmental affairs: the divisions into natural phenomena, built phenomena, economic phenomena, and so on and on. From the perspective of landscape and settlement conservation and development planning, we are concerned with the whole of the environment and what it enables.

The idea of a cultural landscape is fundamental. The term may be given varied meanings, yet, at its core it unites the products of so-called 'natural' ecological processes and phenomena on the one hand, and the products emerging from the processes of transformation of the 'natural' site by people in constructing their 'built' world, on the other. Any area consists of many sites, most of which have been inhabited by people for thousands of years. These places have been moulded, shaped and changed both by natural processes and by people engaged in adapting the environment to their pursuits.

Cultural landscapes are what any one generation inherits from another: in them are embedded values held dear by those gone by. It is the duty and task of any one generation to evaluate that which is inherited and to take appropriate decisions for the future: not only from the perspective of the short-term and how it may be useful to them in a selfish way, but also from a more inclusive communal and longer-term view. It may be considered human nature to act with self-interest, hence the need for

¹⁷ This was also the case in South Africa, where the national agency responsible was then entitled 'National Monuments Council'.

government ideals and guidance, such as an appropriate planning and heritage resources control system whereby the longer term and the public good may be addressed responsibly.¹⁸

	conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation;
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Table 1: Criteria for World Heritage Cultural Landscapes¹⁹

CRITERIA NUMBERS	EXTRACT FROM THE OPERATIONAL GUIDELINES FOR THE IMPLEMENTATION OF THE WORLD HERITAGE CONVENTION: CRITERIA (paragraph 77)
I	represent a masterpiece of human creative genius; or
ii	exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design; or
iii	bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared; or
iv	be an outstanding example of a type of building or architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history; or
v	be an outstanding example of a traditional human settlement or land-use which is representative of a culture (or cultures), especially when it has become vulnerable under the impact of irreversible change; or
vi	be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance (the Committee considers that this criterion should justify inclusion in the List only in exceptional circumstances and in conjunction with other criteria cultural or natural);
vii	contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance; or
viii	be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features; or
ix	be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals; or
x	contain the most important and significant natural habitats for in-situ

Box 2: The European Landscape Convention (selected excerpt)²⁰

1a. "Landscape" means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.

Noting that the landscape has an important public interest role in the cultural, ecological, environmental and social fields, and constitutes a resource favourable to economic activity and whose protection, management and planning can contribute to job creation;

Aware that the landscape contributes to the formation of local cultures and that it is a basic component of the European natural and cultural heritage, contributing to human well-being and consolidation of the European identity;

Acknowledging that the landscape is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding beauty as well as everyday areas;

Noting that developments in agriculture, forestry, industrial and mineral production techniques and in regional planning, town planning, transport, infrastructure, tourism and recreation and, at a more general level, changes in the world economy are in many cases accelerating the transformation of landscapes;

Wishing to respond to the public's wish to enjoy high quality landscapes and to play an active part in the development of landscapes;

Believing that the landscape is a key element of individual and social well-being and that its protection, management and planning entail rights and responsibilities for everyone.

South Africa:

"The NHRA envisages a three-tier system of management of heritage resources, namely National, Provincial and Local. The NHRA requires that all heritage resources be graded in order to assign the appropriate level of management responsibility (i.e. Local, Provincial or National spheres of governance) to a heritage resource and to indicate its

¹⁸ Todeschini (1993) p. 2.

¹⁹ Mitchell, N., Rössler, M. and Tricaud, P-M (authors/eds) (2009).

²⁰ Council of Europe (2014).

significance. Significance is key to assessing grading and is the primary tool in defining heritage management. ... Grading is an important step in the process towards (but not necessarily leading to) the formal protection of a heritage resource, such as declaration as a National Heritage Site, Provincial Heritage Site, or, in the case of Grade III heritage resources, the placing of a heritage resource on the Heritage Register. It is not an end in itself, but a means of establishing an appropriate level of management to proceed with future formal protection. ... Inventories of heritage resources should be drawn up by local authorities as a requirement of section 30(5) of the NHRA, These inventories must contain proposed gradings. ... The grading process is an iterative one and as such, gradings can change based on new information. For example, initial gradings are often based on a relatively cursory survey process. Upon a more detailed investigation, it may be determined by the appropriate Heritage Authority that the grading should change in accordance with the grading criteria. Therefore, the most recent grading by HWC's Council or Committee is accepted as the grading for a heritage resource"²¹

Implications for the Detailed Method Employed

The project has entailed two parallel processes of spatialised enquiry, one mapping the landscape features, the other mapping the cultural and historic 'layers' present in the study area. Obviously, the two have been, and are, strongly inter-related.

The study area is complex and comprises many components. As landscape features themselves (rivers, peaks, passes) may possess heritage significance, thorough analysis has to be undertaken as part of the overall evaluation process. Heritage significance assessments may therefore contain 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 landscapes as integral wholes. It is the nature of the relationship between features, and between these features and the broader landscape setting (context) that is important. What is also important is an understanding about how these landscapes have been produced. In other words, it is essential that the physical informants and

²¹ The Council of Heritage Western Cape (2016) *Grading: Purpose and Management Implications*.

historical events that have given structure and form to the landscape features are understood and appropriately interpreted with regard to heritage significance.

Since this overall landscape approach forms the basis of our method, Figure 2 is a good way to start understanding the study area in terms of its spatial extent and enormous variability, and given the very particular geography of the Stellenbosch Municipality. For example, characteristic features that define the Berg and the Eerste river valleys are the rugged mountains.

Descriptively and analytically, landscapes and cultural adaptations to them may be defined in terms of their skeletal frameworks. These are on the one hand comprised of elemental types, and on the other hand of particular traditions (or protocols) whereby the spectrum of types are brought into some topological and spatial juxtaposition.²² In the design, planning and heritage disciplines this is known as *typomorphology*—the study of landscape / settlement derived from typical and authentic spaces and structuring elements. It is a design approach that has evolved over the decades.²³

The general landscape approach outlined above embodies a highly structured, useful, very practical and accessible set of analytic procedures and spatialised products. Section 3 focusses on the ecological and 'Natural' systems, Section 4 focusses on the 'Cultural' aspects, and Section 5 begins to bring the strands together.



²² It is necessary to stress that in topological and morphological enquiry *structure* takes precedence over *form*.

²³ Todeschini (2014) p. 2. See also: Moudon, Anne-Vernez (1994).

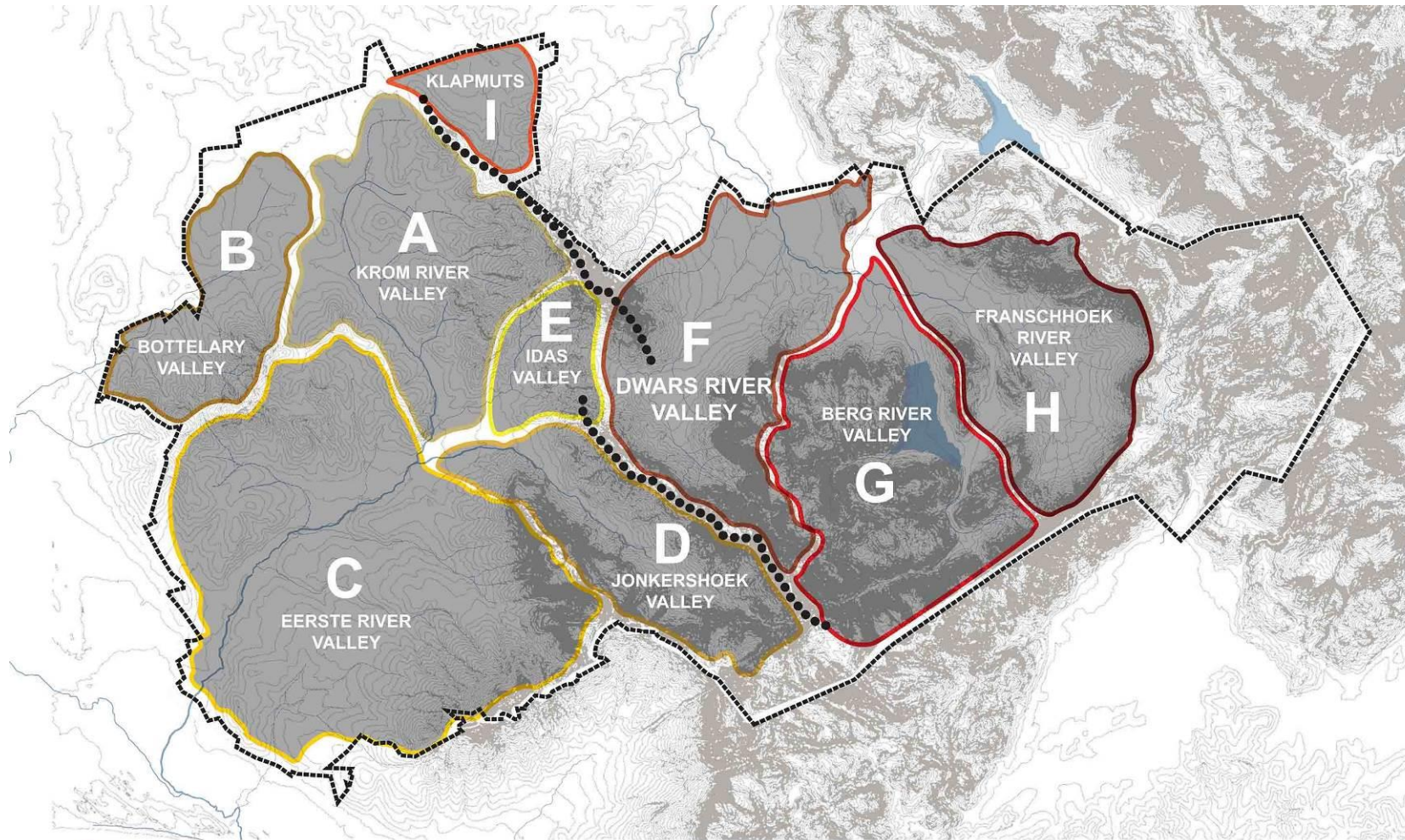


Figure 2

STUDY AREA - VALLEYS



Legend

- Stellenbosch Municipality
- Major Watershed Line
- A: Krom River Valley
- B: Bottelary Valley
- C: Eerste River Valley
- D: Jonkershoek Valley
- E: Idas Valley

- F: Dwars River Valley
- G: Berg River Valley
- H: Franschhoek Valley
- I: Klapmuts

3. NATURAL 'LAYERS': LANDSCAPE FEATURES

This section explains how the series of 'Natural' layers have informed the identification of landscape character areas (proposed Heritage Areas) and areas that are particularly sensitive to development from the ecological and landscape point of view.

Geology

Geology represents the foundation of the study area. The information on Figure 3.1 was sourced from the 1970 Western Cape Geology Map from the Council of Geoscience. It corresponds with the Landform (Figure 3.2) and Soils (Figure 3.3). The Granites represent the areas constituting fertile soils suitable for agricultural production, whereas the Shales and Dolerites represent the mountainous areas. There are a number of fault lines that should be taken cognisance of in terms of major developments such as dams or roads.

Landform

Landform is described by studying the topography of the study area. The contours of the study area can be interpreted to identify slope steepness expressed as gradient, with anything less than 1:4 being the steepest (like mountain slopes) and anything more than 1:10 representing a flatter area (like alluvial plains). Additional landscape features include prominent peaks, ridgelines, geologic features (rock outcrops, cliffs, caves, waterfalls). These are to be mapped in the field in Phase 2b.

As part of our geomorphological approach, the geology and landform provide the overriding traits that determine landscape types at the broad regional scale.²⁴ Geology is the base 'material' of the landscape and landforms are the 'shape' of the landscape, clothed by particular soils, vegetation, and impacted upon by weather, aspect, prospect and so on. In combination, they provide a range of distinct Landscape Types at the macro scale, each with particular scenic characteristics and many with a 'sense of

place'.²⁵ The Landscape Types, mainly derived from a combination of Geology and Landform in this part of the Western Cape, are listed in Table 2 below and are illustrated in Figures 3.1 and 3.2:

Table 2: Landscape Typology of the Stellenbosch Municipal Area.²⁶

Landscape Type	Gradient	Geology	Landform	Landscape Character / Scenic Features
Mountain Ranges	Steeper than 1:4	Table Mt. quartzitic sandstones	High peaks, ridges,	Wilderness character. Mountain Fynbos, and montane forest in the kloofs.
Foothills / undulating plains	Between 1:4 and 1:10	Bokkeveld / Malmesbury shales, granites	Foothills and gently undulating plains Mostly rolling topography with gentle slopes, incised by small rivers.	Vineyards, orchards, other agriculture
Alluvial Valleys	Less than 1:10	Recent alluvium and colluvium	Fertile valleys along river courses	Mainly agricultural.

Aspects to be considered when selecting sites for possible future development include the following:

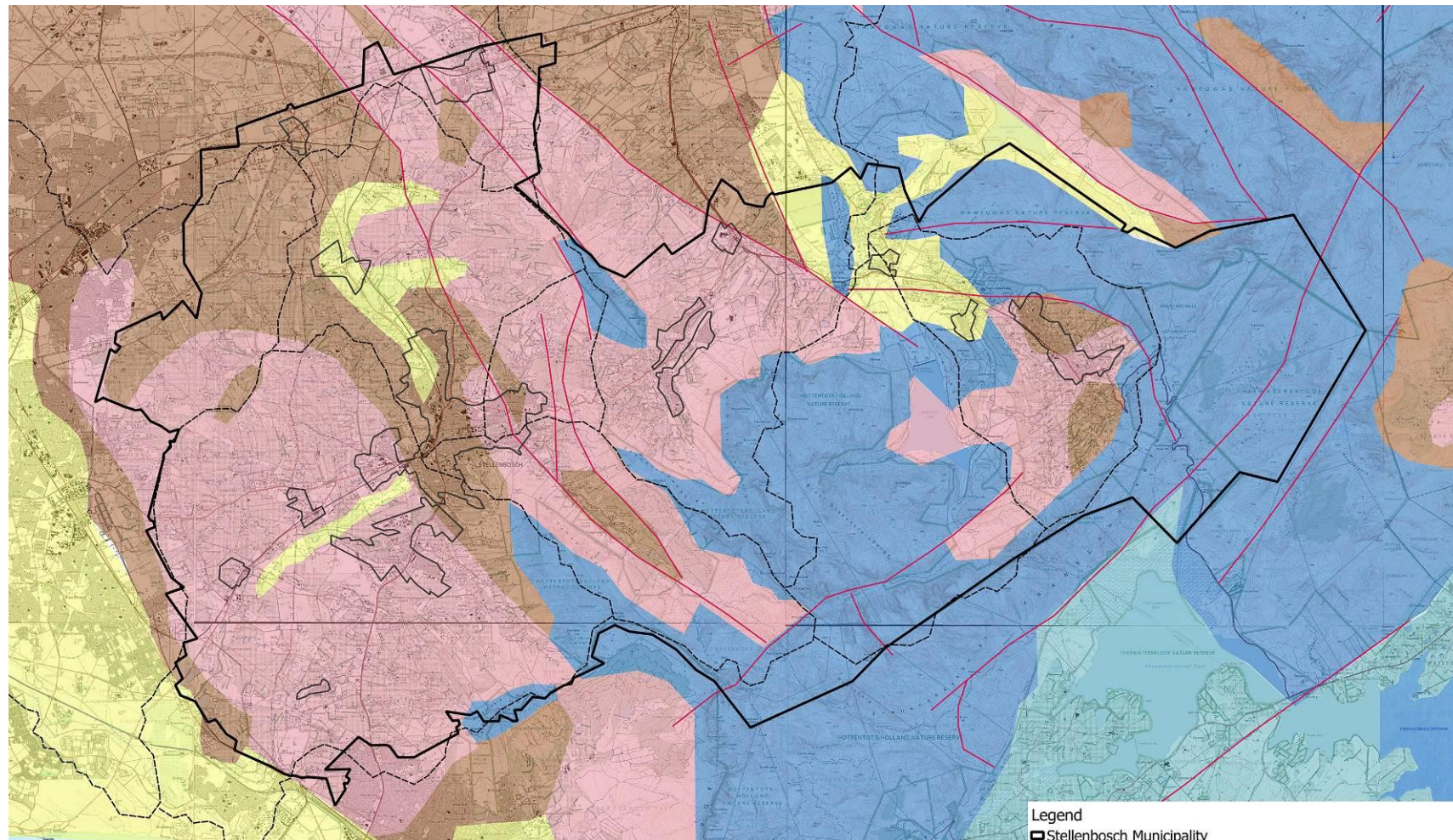
²⁴ Winter, S & Oberholzer, B (2014).

²⁵ Overstrand Heritage Landscape Group (2009).

²⁶ Winter, S and Oberholzer, B (2014).

- Avoid development or infrastructure, such as buildings, roads, wind turbines and powerlines, on crests or ridgelines because of their high visibility and the visual sensitivity of the skyline.
- Avoid development or infrastructure and roads on land steeper than 1:4 for environmental and visual reasons. Visual problems include erosion and scarring, and unsightly cut/fill.
- Avoid development on elevated exposed slopes because of their high visibility from the surroundings. Impose no-go zones for development above a certain contour (e.g. the 150m contour in parts of the Cape Peninsula and the 320m contour in the Cape Winelands).





- Legend**
- ▭ Stellenbosch Municipality
 - Study Area Valleys
 - Urban Edge
 - Fault Lines
- Geology**
- Quartzite, arkose, limestone, shale, phyllite, tillite, lava, tuff - from Nama system
 - Unconsolidated superficial deposit, limestone, sandstone, marl, high-level gravel - Tert. to Quat.
 - Granite, syenitic rocks, quartz porphyry - Cape Granite Kuboos Plutons
 - Shale, sandstone - Bokkeveld series
 - Quartzite, shale, tillite - Table Mountain Series

Figure 3.1 0 2 4 6 8 10 km

LANDSCAPE FEATURES: GEOLOGY

Source: 1970 Western Cape Geology Map, Council for Geoscience



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STELLENBOSCH MUNICIPALITY

HERITAGE SURVEY

 CAPE WINELANDS PROFESSIONAL PRACTICES IN ASSOCIATION

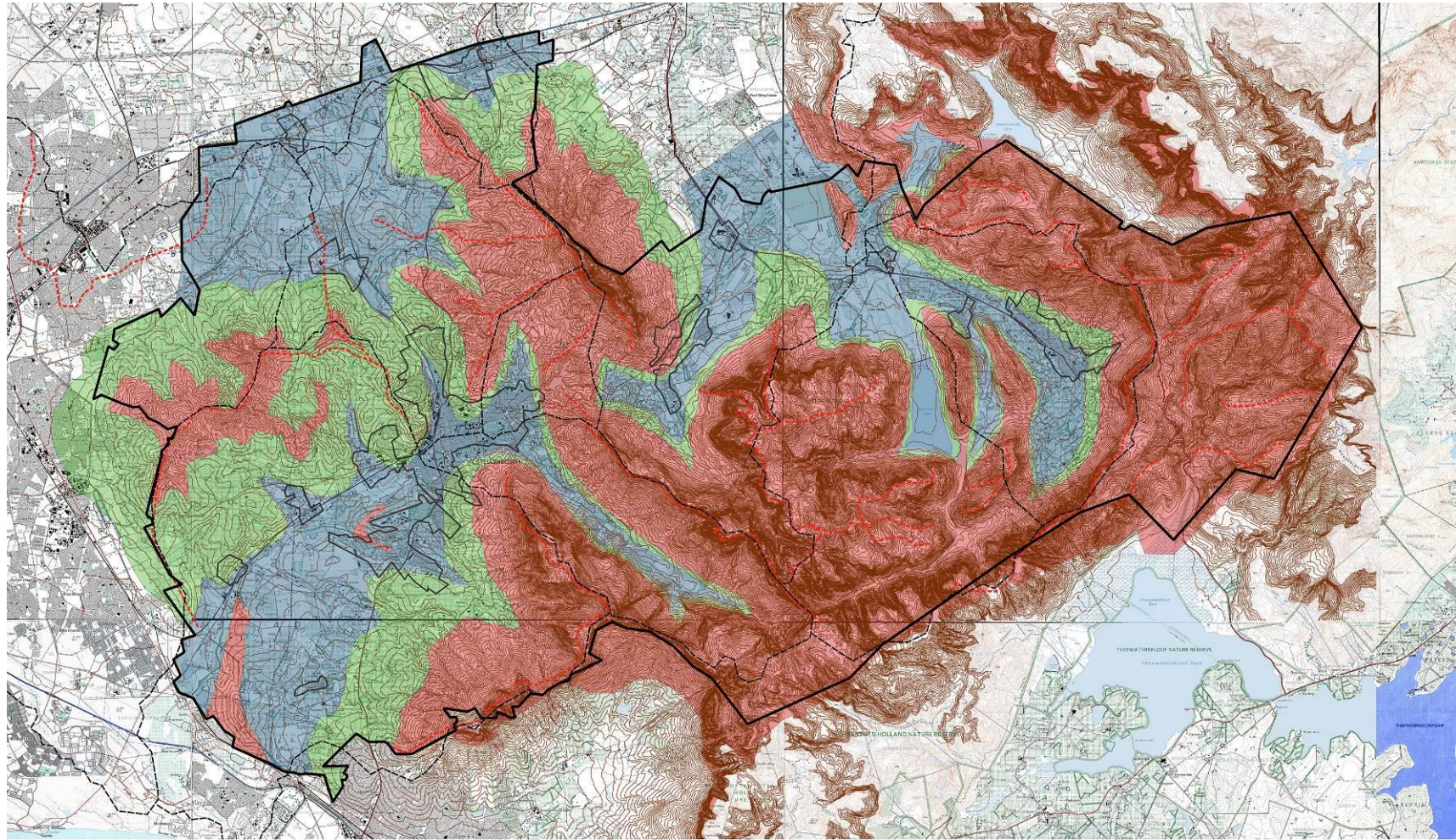


Figure 3.2



LANDSCAPE FEATURES: LANDFORM

Source: Contour Lines from Western Cape Department of Agriculture

Legend

- ▭ Stellenbosch Municipality
- ▭ Study Area Valleys
- ▭ Urban Edge
- Ridgelines
- Contour Lines 20 metres

Landform

- Mountainous: gradient steeper than 1:4
- Foothills: gradient between 1:4 and 1:10
- Valleys: gradient flatter than 1:10

Soils²⁷

Geology and soils are closely related. In terms of soil science, the term "soil" refers to the surface layer of the earth's crust. It is an integral part of the landscape with properties, aspect and distribution that are determined by environmental factors such as climate, parent material, topography, flora, fauna and time. The term "soil" as used here includes the morphological, physical, chemical and mineralogical characteristics of the soil itself. It should therefore not be confused with the term "land". Figure 3.3a indicates the distribution of the various soil types in the Stellenbosch municipal area.

As mentioned previously, this study follows a landscape approach, and a considerable effort is made to define the character of the study area and identify those areas essential to its integrity. A key contributing factor to the character of the study area are the agricultural activities that have occurred on the land over the centuries (Appendices 1 and 2). Much of the Rural Domain has a high agricultural potential.

Agricultural potential depends on the characteristics of land and management input. The concept "land", as it is used here, refers to the space used on and under the earth's surface. It has natural characteristics that include climate, soil, slope and vegetation. "Soil" is therefore not synonymous with "land" but is only one of its determining characteristics.

Agricultural potential reflects the production capacity of land under specific management practices. Therefore, the individual components of land (soil, climate and topography or terrain) do not have an agricultural potential but only suitability with respect to agricultural activities. In this way, a certain climate can be suitable for the cultivation of certain crops, but if the soil is unsuitable, the potential is low. In the same way, a certain soil can have all the characteristics that make it suitable for the cultivation of a specific crop on a specific terrain, but if the climate is unfavourable the potential is low. However, if the climate is favourable the potential is high. The term soil suitability is thus used here to refer to the capacity of the soil component of land. It excludes the influence of climate and topography.

Figure 3.3b indicates the Soil Suitability of the study area, as developed by VinPro (Heinrich Schlomms and Dr Freddie Ellis). The

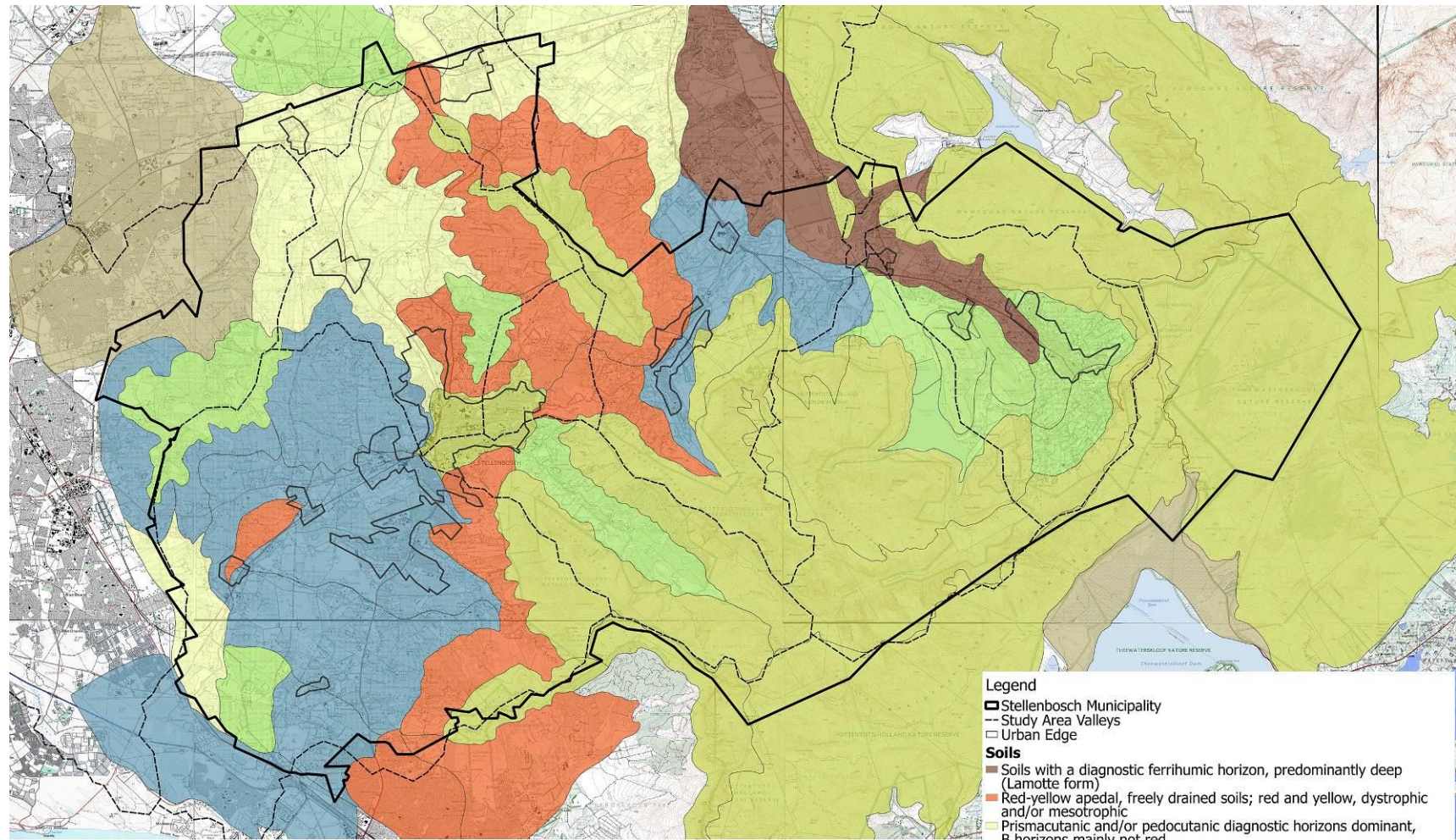
suitability rating ranges from 1 to 10, with 1 the lowest and 10 equal to the highest or best suitability.

In order to retain the landscape character of the area, soils with a medium to high suitability to agriculture should be conserved because of their relative scarcity, the need for food security, and for the scenic and cultural value of traditional farming areas. We need to avoid building development and extensive earthworks, such as are comprised in roads, landfills, cement works and quarries or borrow pits, in areas with productive soils and promote productive use of these soils²⁸



²⁷ Information provided by Dr Freddie Ellis, retired lecturer at The Department of Soil Science, University of Stellenbosch

²⁸ Winter, S and Oberholzer, B (2014).



- Legend**
- ▭ Stellenbosch Municipality
 - Study Area Valleys
 - Urban Edge
- Soils**
- Soils with a diagnostic ferrihumic horizon, predominantly deep (Lamotte form)
 - Red-yellow apedal, freely drained soils; red and yellow, dystrophic and/or mesotrophic. Prismatic and/or pedocutanic diagnostic horizons dominant, B horizons mainly not red
 - Plinthic catena: undifferentiated, upland duplex and/or marginalitic soils common
 - Plinthic catena: dystrophic and/or mesotrophic; red soils widespread, upland duplex and marginalitic soils rare
 - Plinthic catena: dystrophic and/or mesotrophic; red soils not widespread, upland duplex and marginalitic soils rare
 - Miscellaneous land classes, very rocky with little or no soils
 - Miscellaneous land classes, undifferentiated deep deposits
 - Miscellaneous land classes, rocky areas with miscellaneous soils
 - Grey regic sands and other soils
 - Glenrosa and/or Mispah forms (other soils may occur), lime rare or absent in the entire landscape



Figure 3.3a



LANDSCAPE FEATURES: SOILS

Source: Western Cape Department of Agriculture

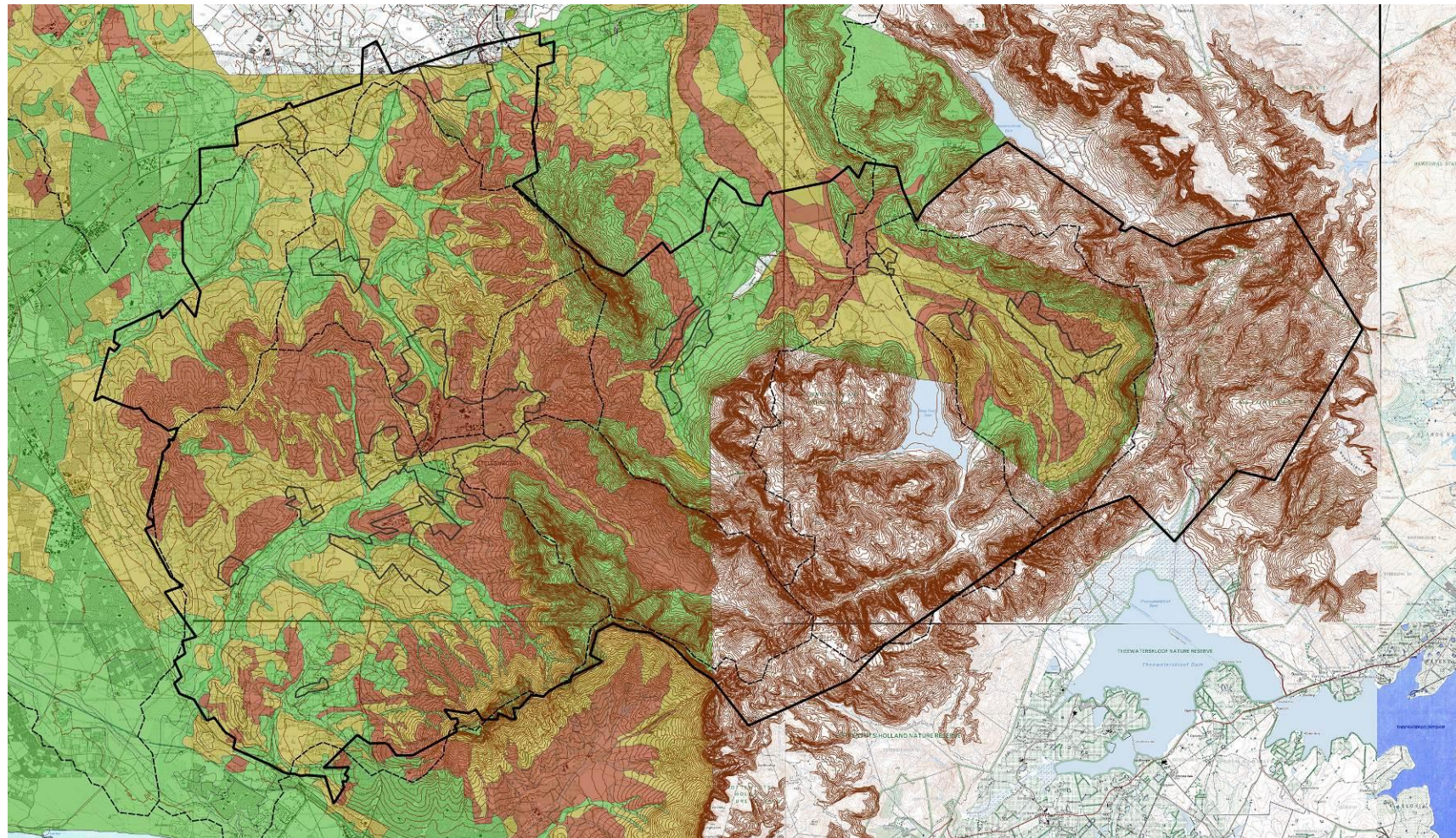


Figure 3.3b

LANDSCAPE FEATURES: SOIL SUITABILITY

Source: VinPro (Heinrich Schloms and Dr Freddie Ellis)

- Legend**
- ▭ Stellenbosch Municipality
 - Study Area Valleys
 - Urban Edge
 - Contour Lines 20 metres
- Suitability to Agriculture**
- >6 High
 - 4-6 Medium
 - <4 Low

Hydrology

The Landform Map (Figure 3.2) clearly illustrates the study area as consisting of a number of mountainous areas, with associated foothills and alluvial plains. The area can be further divided into a number of watersheds. A watershed describes an area of land that contains a common set of streams and rivers that all drain into a single larger body of water from a common catchment area defined by ridgelines on mountains and hills. These watersheds, and valleys, all display distinctive landscape character, as they are other 'worlds' that are spatially defined by mountain slopes and often feature different vegetation types, settlement patterns and human activities. These 'parent' valleys, coupled with the soils and vegetation, constitute and comprise different Landscape Units within the study area (each possessing distinctive character). The valleys are illustrated in Figure 2 and the Landscape Units will be defined as part of the Phase 2b work.

The hydrology layers illustrated in Figure 3.4 include the major rivers such as the Eerste and Berg Rivers, but also their secondary tributaries and other drainage lines. It is important to note that legislation requires that no development occurs within the 1 in 100 year flood plain. However, we have been unable to source this information, although we have consulted the Stellenbosch Municipality, the Department of Water Affairs (DWA), the Department of Water and Sanitation (DWS and; the Western Cape Department of Agriculture (WCDA). We are hoping to add this layer during the course of Phase 2b work.

Wetlands are another hydrological feature sensitive to development and integral to the landscape character of the study area. However, the hydrological GIS datasets we received from the Stellenbosch Municipality, the Department of Water Affairs & Forestry, the Department of Water & Sanitation as well as the Western Cape Department of Agriculture, grouped all the wetlands, farm dams and other waterbodies into one classification called 'Waterbodies'. In order to cover hydrological features sensitive to development (Drainage courses, Wetlands, 100 year Flood lines, Springs) we resorted to using the Western Cape Nature Conservation Board (WCNCB) and DWA's Ecological Support Areas from the Western Cape Biodiversity Sector Plan: Spatial Assessment 2016 (see further clarification in Section 6: Recommendations below).

In order to retain the landscape character of the area, rivers and wetlands must be conserved for their water resources in a largely water-stressed region, as well as for their ecological, scenic and recreational value²⁹.



Vegetation

The Stellenbosch Municipal Area is in a unique position in that almost a third constitutes wilderness, featuring a universally significant Biome (Fynbos) and resultant vegetation types. The study area forms part of the Cape Floristic Region Unesco World Heritage Site and the Cape Winelands Biosphere Reserve. The value of the indigenous and endemic (natural) vegetation should not be underestimated and should be preserved wherever possible. The Fynbos and the Renosterveld vegetation groups (see Figure 3.5a) form an integral part of the highly unique landscape character of the study area and are under severe threat.

On the other hand, as discussed in the Soil section above, agricultural activities also contribute to the distinctive character of the landscape. The Cultivated Vegetation Map (Figure 3.5b) is an illustration of the high potential for agriculture on the land due to the excellent suitability of soil, climate (including availability of water) and terrain.

²⁹ Winter, S and Oberholzer, B (2014).

To maintain the character of the landscape, the remaining areas of endemic or endangered natural vegetation should be conserved (see Critical Biodiversity Areas below) and development on good agricultural soils should be avoided, as they are essential to maintain productive landscape qualities. Piecemeal subdivisions and the fragmentation of farmland into unviable units or 'agricultural islands' should be avoided, as this results in farming activities becoming 'incompatible' with surrounding urban or suburban uses. An overriding principle should be to conserve the productive, scenic and heritage value of the agricultural valleys.³⁰

We also draw attention to the Preamble of the Preservation and Development of Agricultural Land Bill,³¹ which states:

"Whereas it is in the national interest to preserve, and promote sustainable use and development of agricultural land ...; Recognising the pressures exerted on agricultural land making it increasingly difficult to effectively and sustainably produce food; Further recognising that high value agricultural land is a scarce and non-renewable resource; and recognizing that it is in the interests of everyone to have agricultural land protected ...; ... sustainable development of agricultural land requires the integration of social, economic and environmental considerations in both forward planning and ongoing"



³⁰ Winter, S and Oberholzer, B (2014).

³¹ Republic of South Africa Department of Agriculture, Forestry and Fisheries (August 2016).

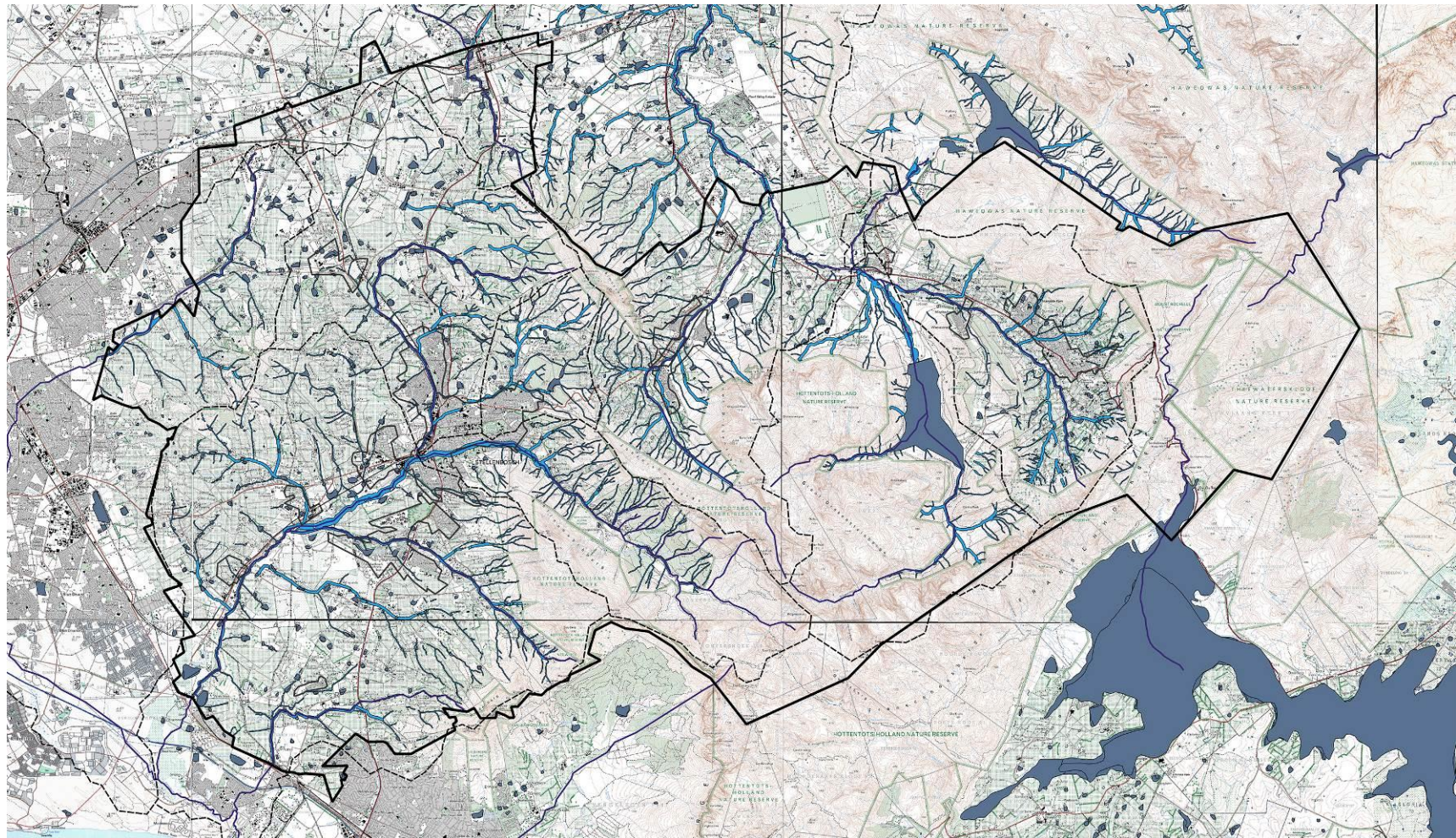


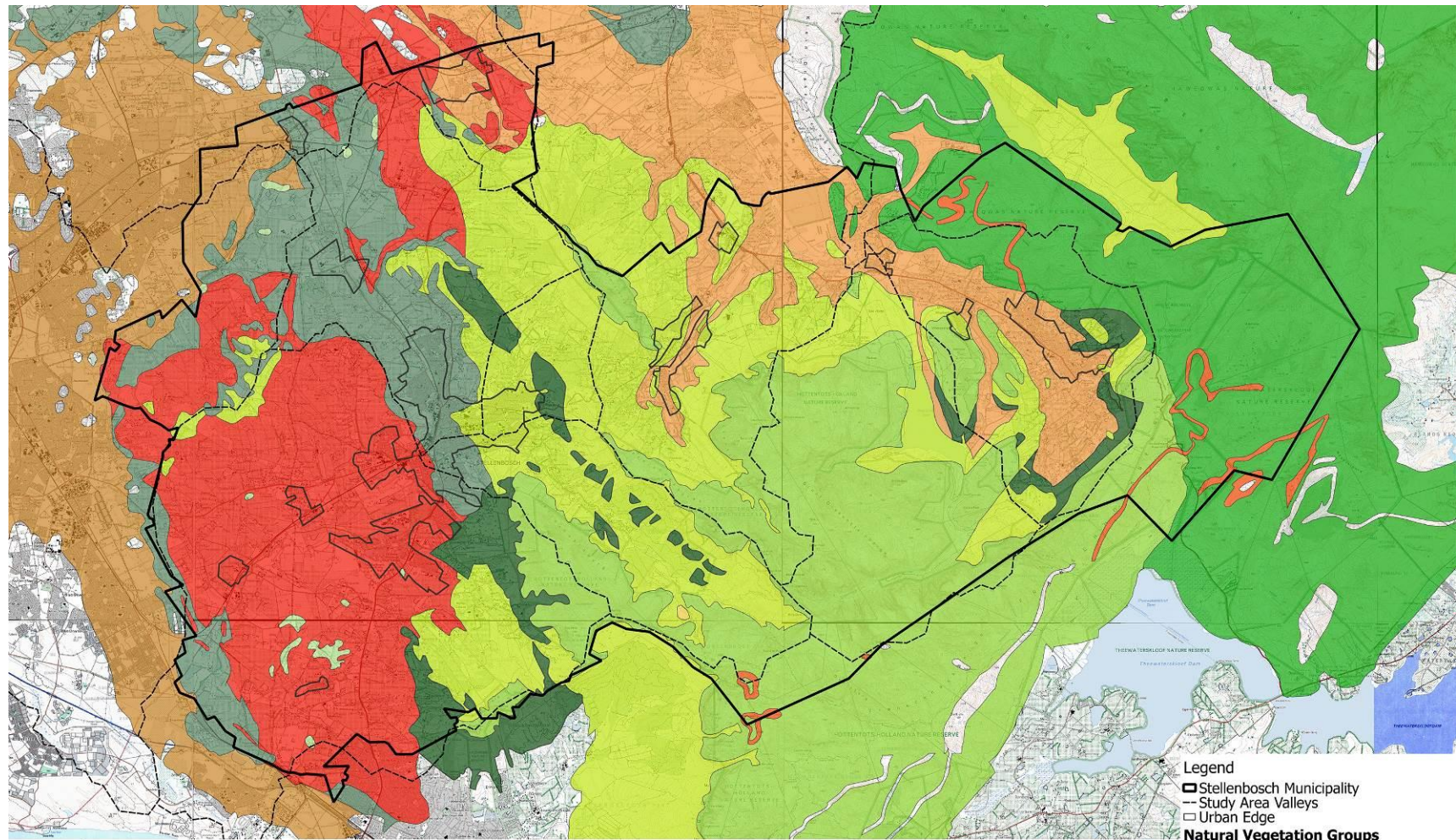
Figure 3.4

LANDSCAPE FEATURES: HYDROLOGY

Source: Western Cape Department of Agriculture, Western Cape Nature Conservation Board (WCNSP/016/Beta): Cape Winelands - CSA Map (Pence & Pretorius)

Legend

- ▭ Stellenbosch Municipality
- - - Study Area Valleys
- Urban Edge
- Major Rivers
- Waterbodies
- Ecological Support Areas



- Legend**
- ▭ Stellenbosch Municipality
 - - - Study Area Valleys
 - Urban Edge
- Natural Vegetation Groups**
- Boland Granite Fynbos
 - Cape Flats Sand Fynbos
 - Cape Winelands Shale Fynbos
 - Hawequas Sandstone Fynbos
 - Kogelberg Sandstone Fynbos
 - Southern Afrotemperate Forest
 - Swartland Alluvium Fynbos
 - Swartland Granite Renosterveld
 - Swartland Shale Renosterveld
 - Swartland Silcrete Renosterveld
 - Western Coastal Shale Band Vegetation



Figure 3.5a



LANDSCAPE FEATURES: NATURAL VEGETATION

Source: Western Cape Department of Agriculture

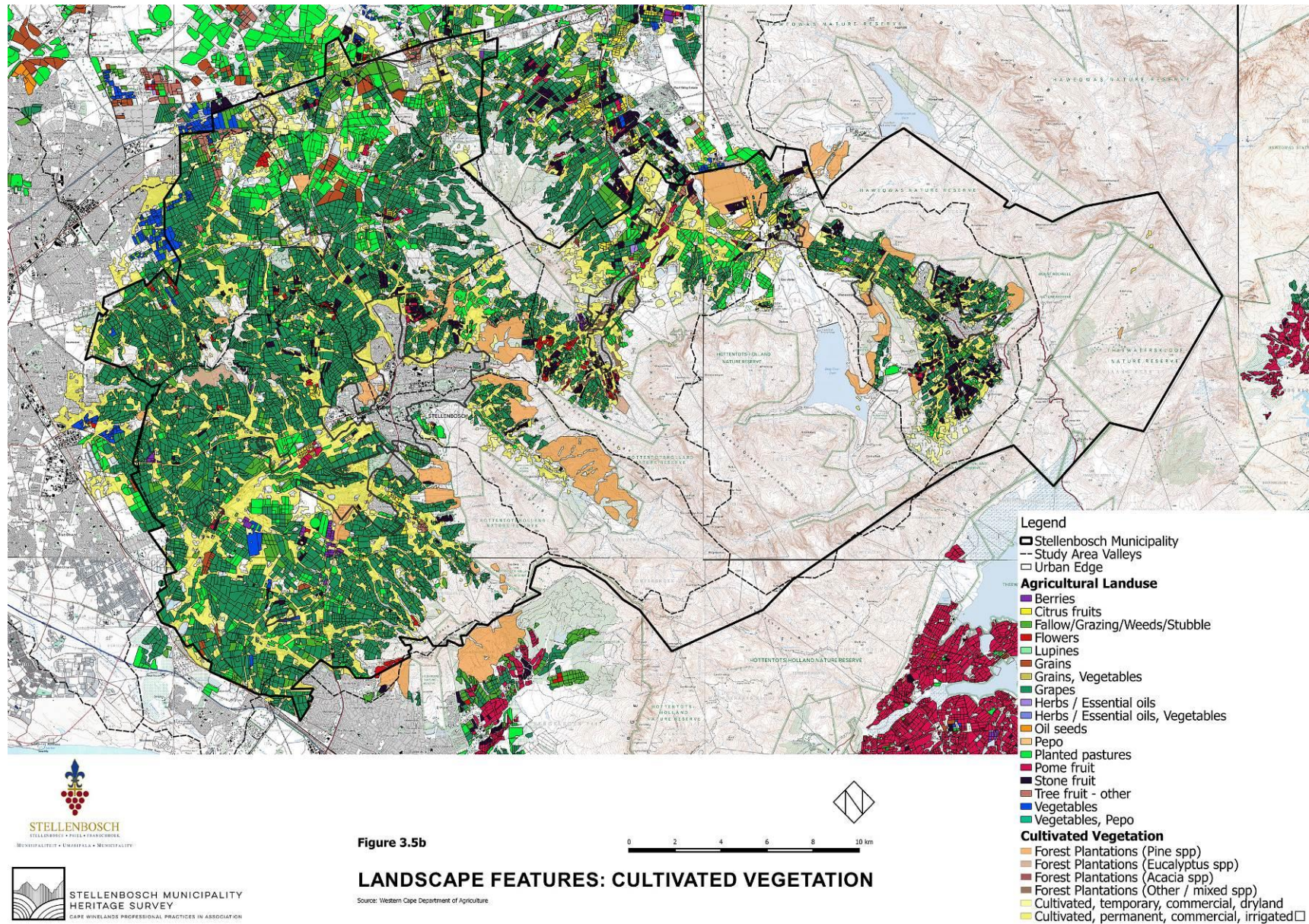


Figure 3.5b

LANDSCAPE FEATURES: CULTIVATED VEGETATION

Source: Western Cape Department of Agriculture



Conservation: Protected areas and Biodiversity

The study area consists of vast tracts of State Forest Nature Reserves, Mountain Catchment Areas, Provincial Reserves, Private Nature Reserves, Local Authority Nature Reserves, Protected Natural Environments and Conservancies (see Figure 3.6a). These go a long way in protecting the integrity of the natural landscape. However, it is notable and somewhat unfortunate that these areas are predominantly located in the higher gradient mountainous landform and not in the foothills or alluvial plains.

The Western Cape Biodiversity Sector Plan: Spatial Assessment 2016, a project of the Western Cape Nature Conservation Board: Scientific Services, is a continuation of the 2010 Biodiversity Sector Plan and Western Cape Biodiversity Framework and its 2014 Update. We received permission to use the beta version of the Western Cape Biodiversity Sector Plan 2016 for the purposes of this project, which is described below³²:

Title: WCBSP2016vBeta: Cape Winelands - CBA Map

Date of layer completion: 15/08/2016

This GIS dataset is a beta version, 'quick-reference' layer indicating the location of all known Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs) and other spatial biodiversity planning categories, as per the Western Cape Biodiversity Sector Plan: Spatial Assessment (Pence and Pretorius, 2016). A Biodiversity Sector Plan serves as the primary spatial biodiversity informant guiding proactive conservation action and directing land-use planning and reactive decision-making in local, provincial and national spheres of government.

Methodology / Lineage Description:

The method for selecting Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) from the full set of terrestrial and aquatic features in the province was based on a systematic biodiversity planning approach whereby targets (quantitative objectives) were established for a representative suite of biodiversity and ecological infrastructure features. Spatial layers depicting each feature were either sourced or developed in-house,

and the decision-support software Marxan was used (via a CLUZ plugin, in QGIS) to generate the best spatial solutions (i.e., most efficient selection of planning units required) for meeting conservation targets.

Temporal Extent of the Dataset: CapeNature will be further updating the data. Requires verification.

The Critical Biodiversity Areas (CBA) and Ecological Support Areas (ESA) are essentially a combination of the following layers and their biodiversity significance (high to low):

- Ecosystems
- Vegetation Types
- Wetland Types
- River Types
- Estuaries
- Indigenous Forest
- Species, including
 - Threatened Plants
 - Threatened Butterflies
 - Threatened Reptiles
 - Amphibian guild
 - Fish
 - BMP-S species (fauna)³³

Our rationale is that the CBA and ESA layers embody those natural hydrological, vegetation and ecological variables that are integral to maintaining the landscape character in some of the Stellenbosch Rural Domain. The CBAs constitute highly significant areas and the ESAs include areas of medium significance, even from a heritage perspective. This is because agricultural and heritage values overlap in these considerations.

³² Pence and Pretorius (2016a).

³³ Pence, G & Pretorius, J. (2016b)

Climate

Unfortunately, the climate data available is not in a format that we can use in this sub-phase of the project. During Phase 2b we will have time to convert the data so as to properly assess the influence of the following variables, since microclimate = comfort zones = humidity, coolness, warmth:

- Aspect (Cooler Slopes, Warmer Slopes);
- Wind Direction and Velocity;
- Rainfall;
- Katabatic Wind Flows.

Natural Constraints

Figure 3.7 represent those sections of the study area that very significantly contribute to its landscape character and should be conserved. The Critical Biodiversity Areas and the highly suitable soils for agriculture are specific spatialised informants that underpin a high level of heritage resources. The Ecological Support Areas and moderately suitable soils underpin areas that have medium heritage resource significance.

Further significant landscape features that have been noted previously and should be considered in conjunction with Figure 3.7 are:

- Ridgelines and crests;
- Slopes steeper than 1:4.



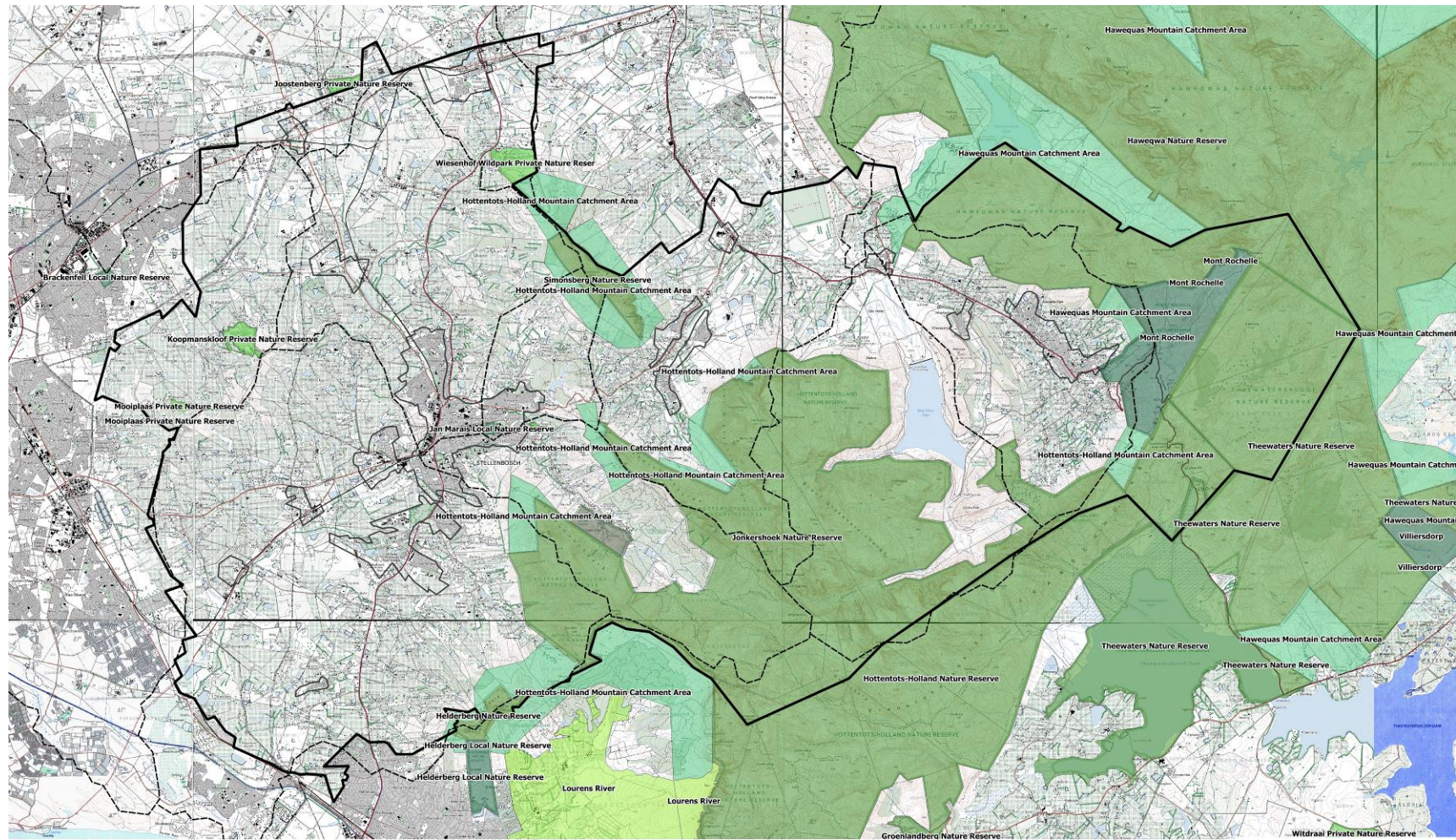
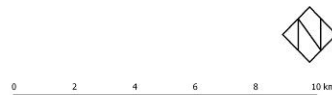


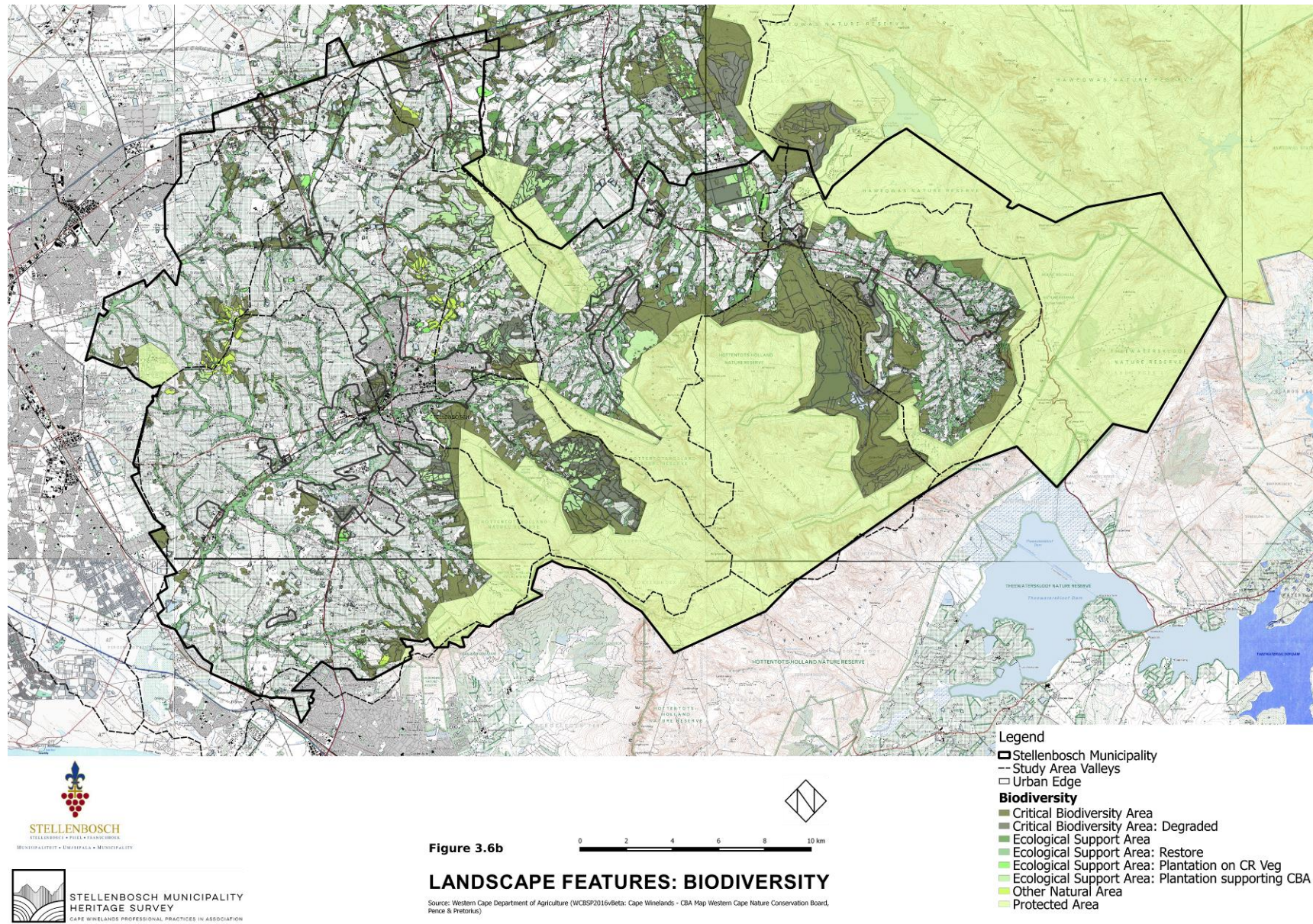
Figure 3.6a

LANDSCAPE FEATURES: PROTECTED AREAS

Source: Western Cape Department of Agriculture



- Legend**
- ▣ Stellenbosch Municipality
 - Study Area Valleys
 - Urban Edge
- Protected Areas**
- Mountain Catchment Area
 - Local Authority Nature Reserve
 - Provincial Reserve
 - State Forest Nature Reserve
 - Protected Natural Environment
 - Private Nature Reserve



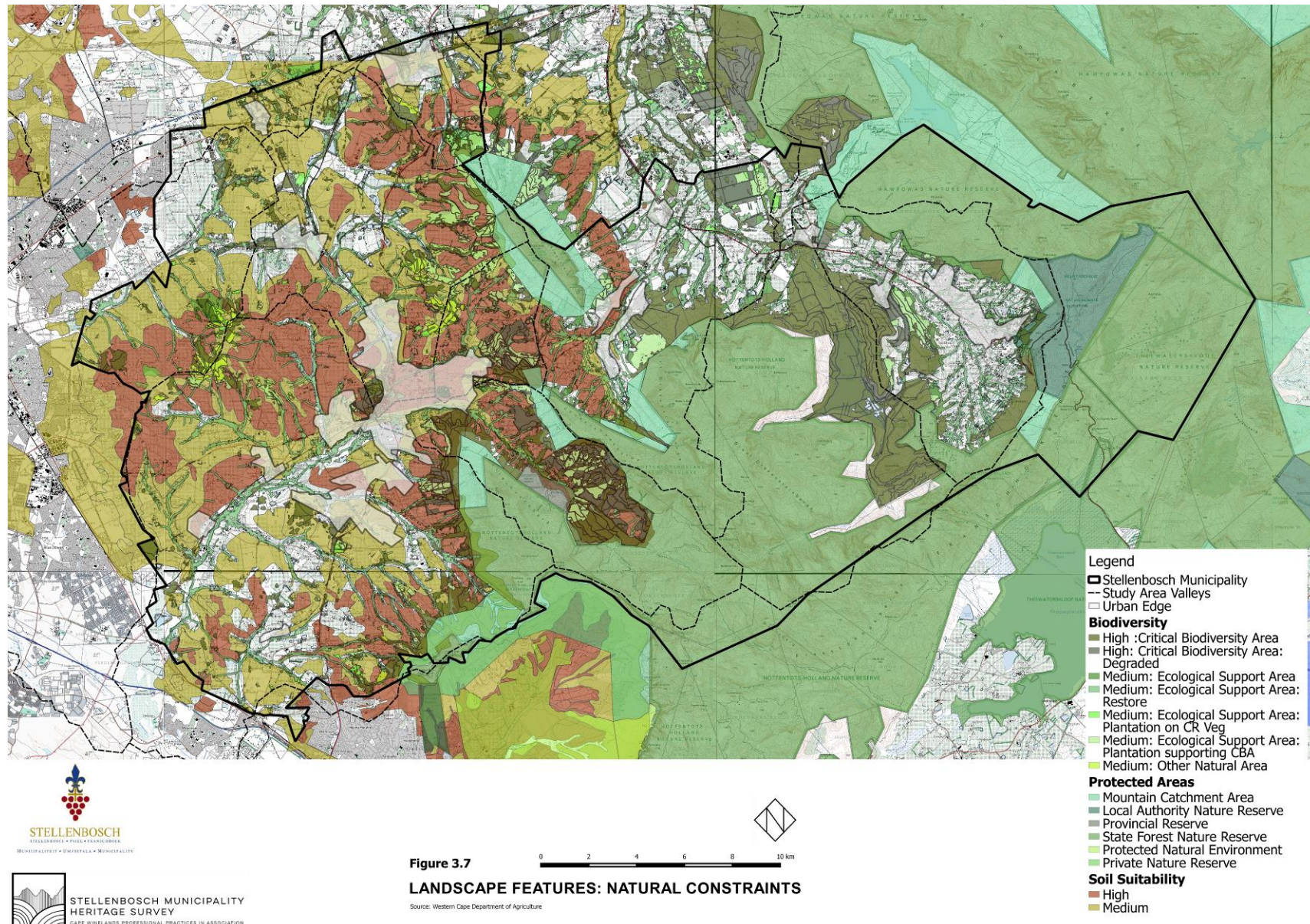


Figure 3.7
LANDSCAPE FEATURES: NATURAL CONSTRAINTS

Source: Western Cape Department of Agriculture



4. CULTURAL 'LAYERS'

The starting point has been research into the historical evolution of what we have inherited. This is because, both ecologically and in terms of cultural history, it is necessary to 'unpack' and reveal the progression of events and informants that have given shape to the socio-spatial outcomes and periods of interactions embodied in the overall material inheritance. Three specific arenas of research, and 'products' flowing therefrom, have been part of our research in this regard:

- The development of a socio-cultural Timeline and the associated sources that help us all better understand the historical evolution of the structure and form of what we have inherited;
- An account of the paleontological, archaeological, historical archaeological and other tangible material cultural products that we have inherited, including whole landscapes, in the Stellenbosch municipal area;
- A map sequence that captures the main features of the spatial and tangible evolution of the ecological and cultural features that we have inherited. The period since the inception of modernism in the first decades of the 20th century is emphasised in order to critically understand, visualise and assess the tendencies still currently at play. Appropriate ways must be found to redress past wrongs, to analyse and accommodate current needs and to define a way forward as regards developments for the future, while acknowledging and working within the constraints imposed by protecting significant heritage resources.

Appendices 1, 2 respectively address the above first two areas of work in some detail. The mapped development sequence is contained in this section of the report. Because we are here reporting on Phase 2a of the project, and work is to continue until the end of July 2017 (the conclusion of the whole of Phase 2), the products emerging from these three arenas of work are all in draft form. They will be amplified and further edited in due

course. However, we are of the view that their current content is sufficient to meet the requirements of Phase 2a of the project.

Figure 4.1 illustrates places of Khoekhoe and colonial first contact in the study area, as well as the early farm grants and wagon routes, which were doubtless based on earlier resource use and preferences (and as observed and reported in historic records). During Phase 2b we will prepare maps that relate to the pre-colonial period.

The illustrations included in figure 4.2 are a selection of historical maps that give an indication of the development of settlement post-1750 (these will be added to during the course of Phase 2b of the project).

Reflected in the sequence of figures 4.3 to 4.7 is development closer to our own time, spanning 1935 to 2010, and inclusive of the surviving historic sites and homesteads. What is most striking from even a cursory look at this map sequence is the phenomenal growth of the Urban Domain, comprising extensive areas of suburbia. Not only has Stellenbosch itself fragmented and grown significantly laterally into the countryside; even more so has Somerset West grown very substantially (particularly in very recent years). So has Greater Cape Town, threatening to engulf the western edges of the Bottelary Hills and of the Eerste River in the proximity of Meerlust farm. Just outside the Stellenbosch municipal area, to the south and south-west, extensive 'carpets' of suburbia are currently being developed, inter alia where historic wetlands such as the Zeekoevlei have been obliterated. This 1935 to 2010 mapped development sequence brings to the fore the sheer scale of the confrontation that is occurring between conservation and development in and beyond the study area.

We submit that, given the vast array of heritage resources present in the study area that underpin its very character and its economy (including heritage resources embedded in cultural landscapes), the sequence of maps underscores both the need to conserve heritage-worthy features and the need to rethink the form and structure of future settlement growth. Settlement should be far more compact than is currently the norm and be less damaging to the fundamental productive agricultural areas and scenic context within which Stellenbosch is situated.³⁴

³⁴ This would be entirely in line with enunciated National and Provincial Human Settlement policy.

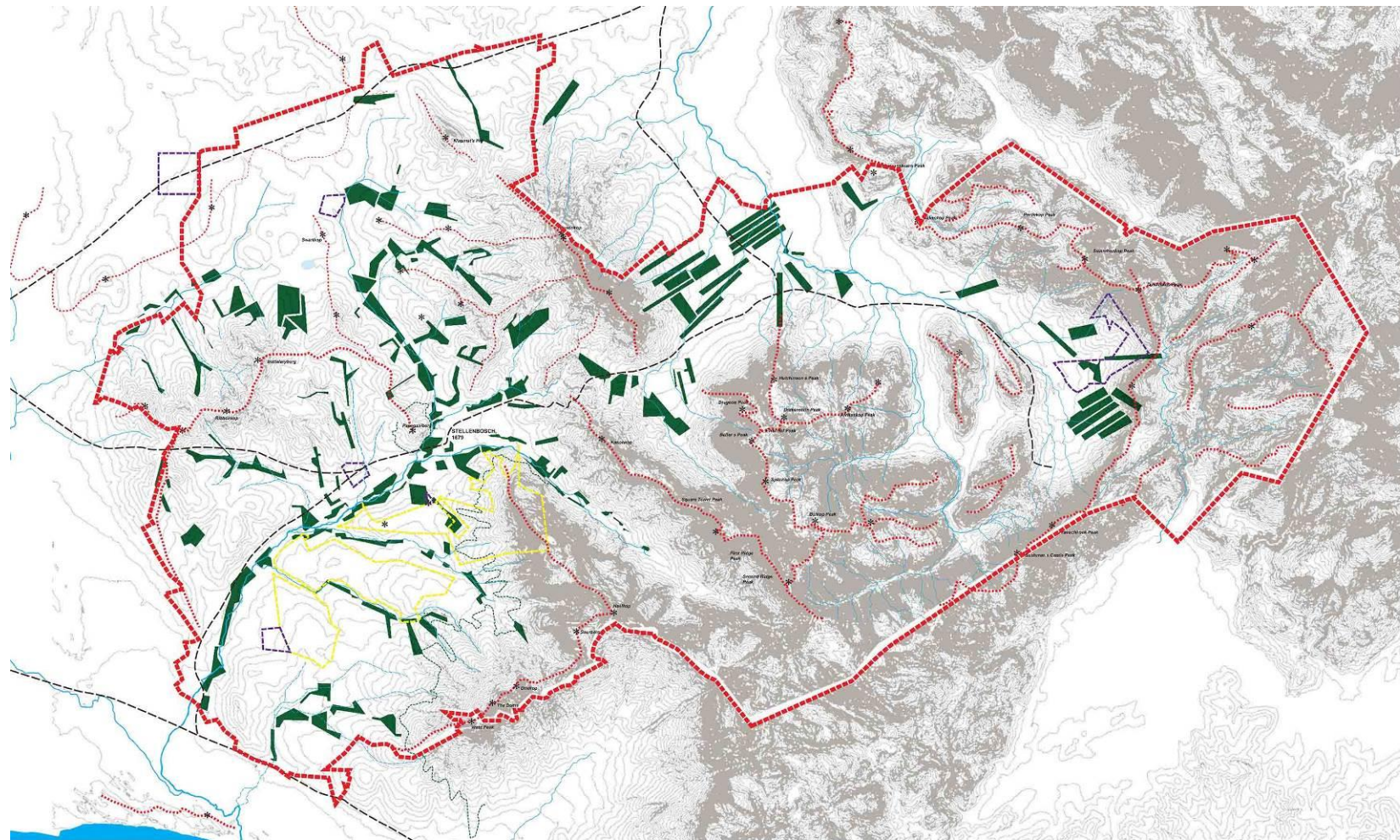


Figure 4.1



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

DEVELOPMENT OF THE CULTURAL LANDSCAPE: 1657 - 1750

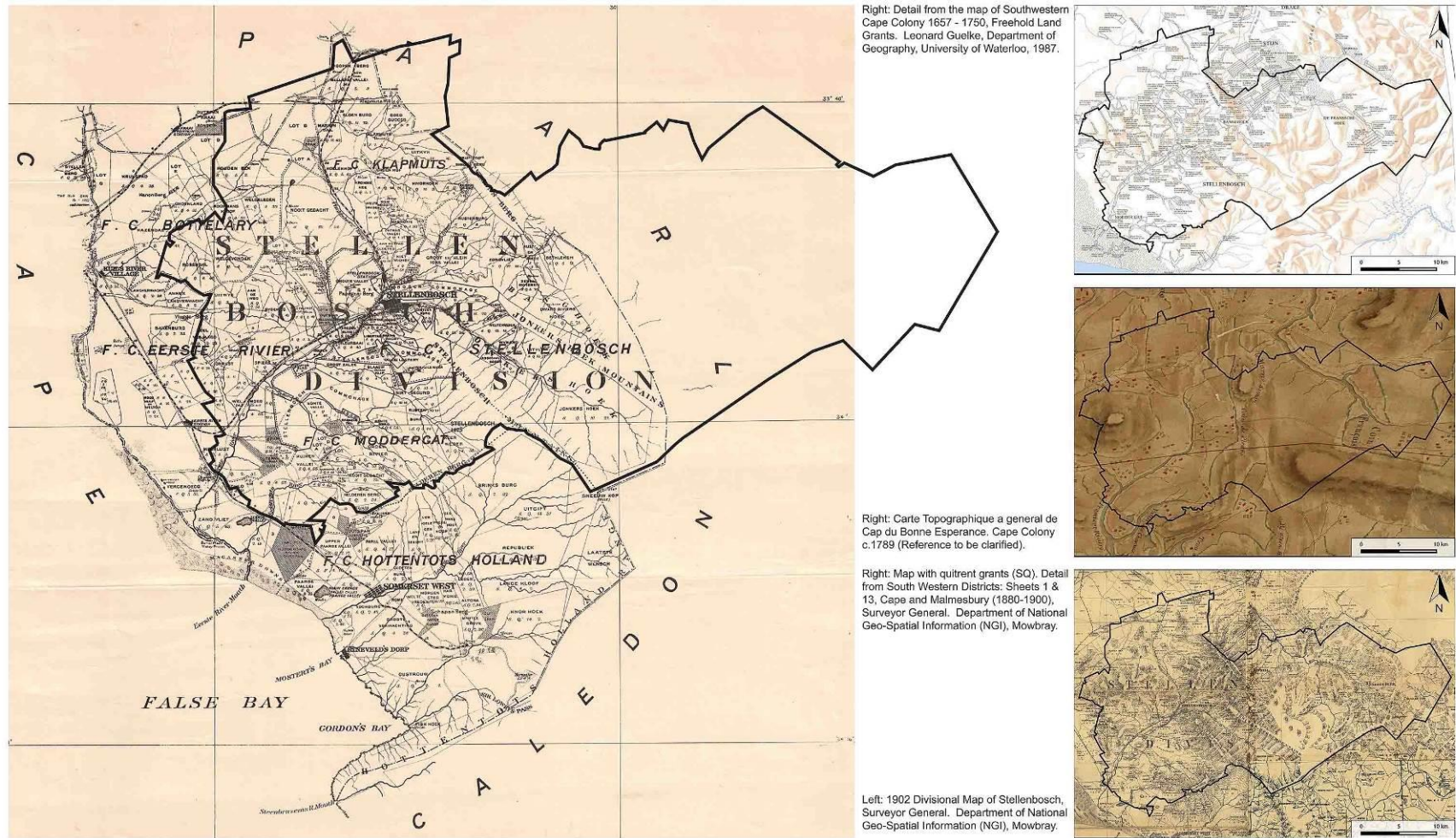


Figure 4.2

0 2 4 6 8 10 km

DEVELOPMENT OF THE CULTURAL LANDSCAPE: GEO-REFERENCED HISTORICAL MAPS

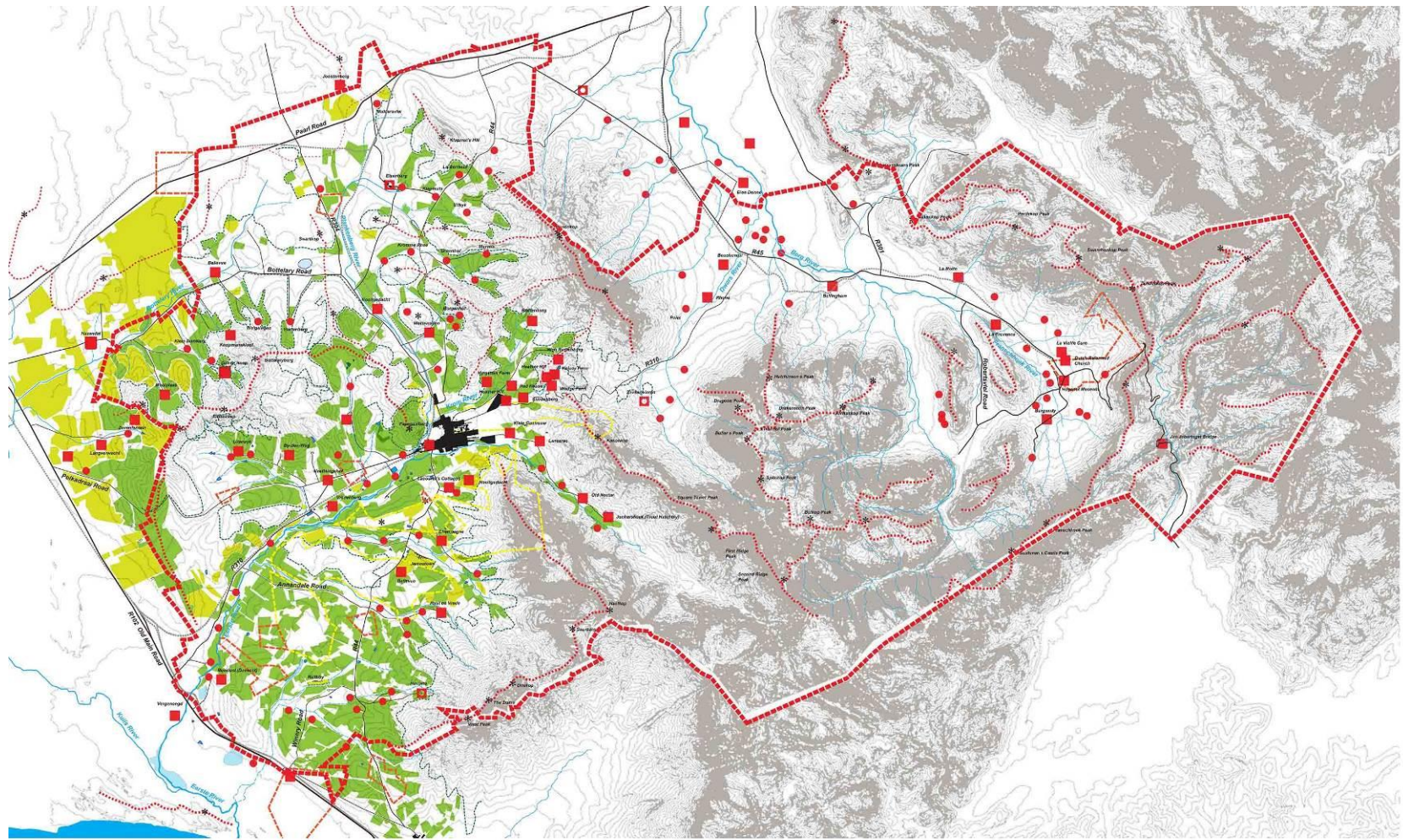


Figure 4.3



DEVELOPMENT OF THE CULTURAL LANDSCAPE: 1935 - 1941

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

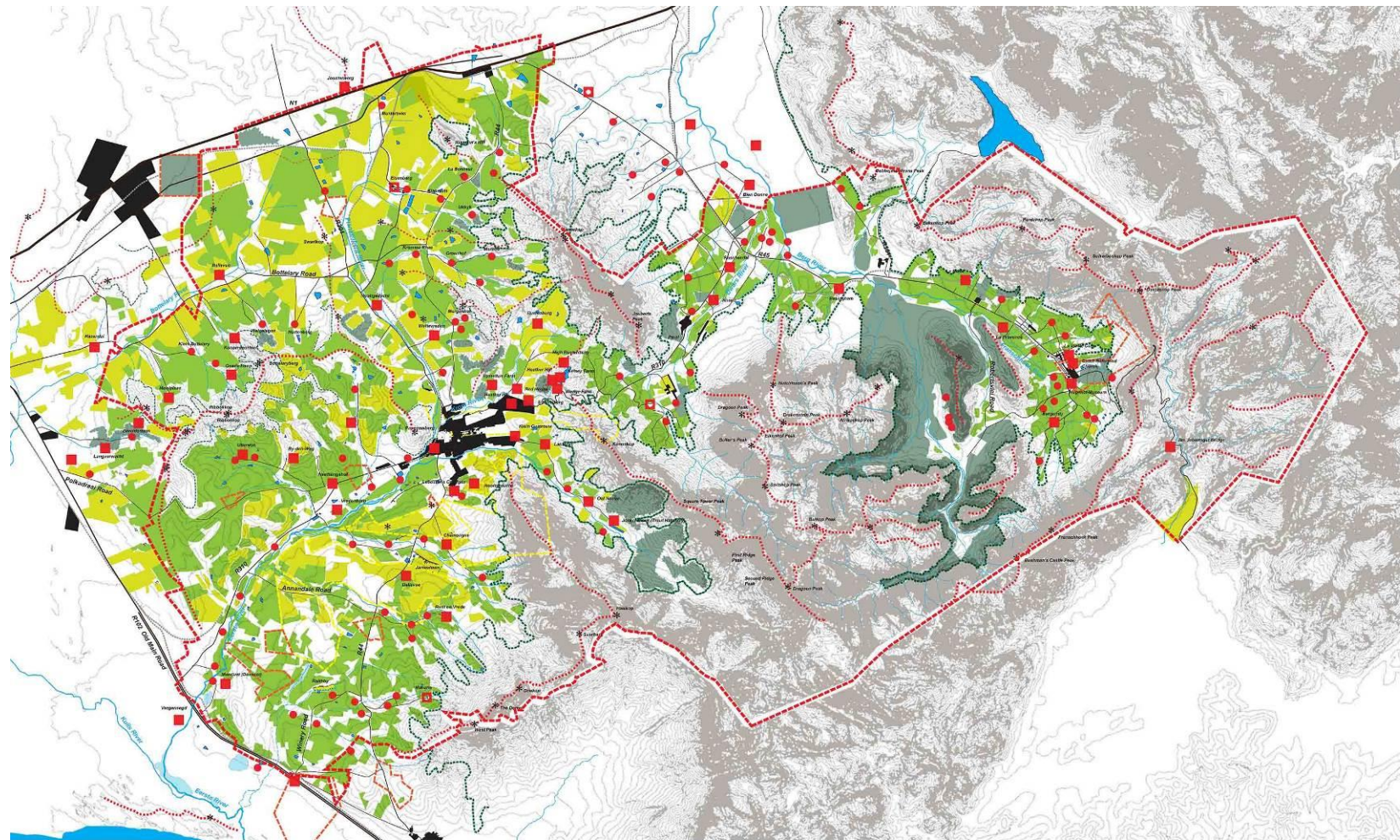


Figure 4.4



DEVELOPMENT OF THE CULTURAL LANDSCAPE: 1958 - 1962

- 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

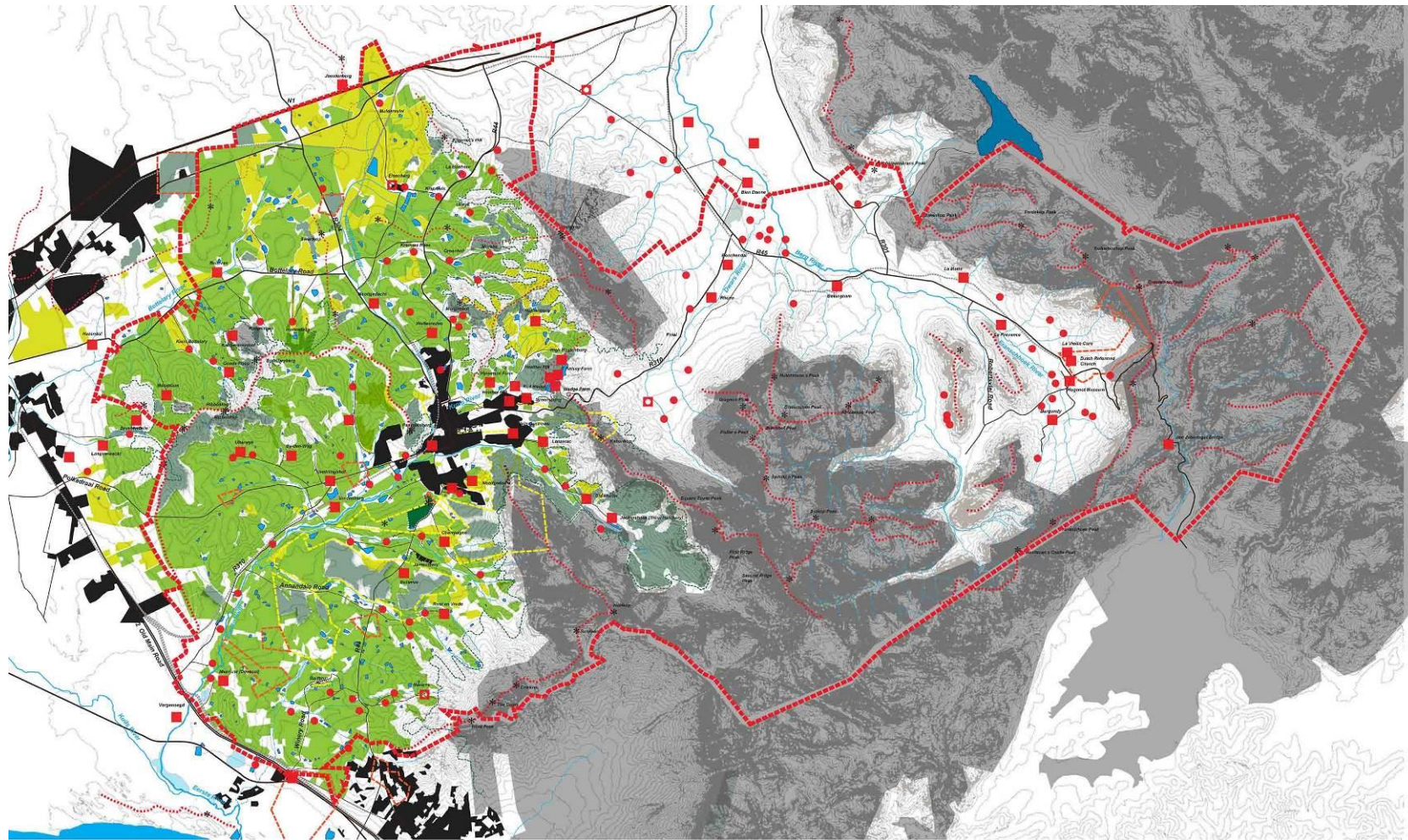


Figure 4.5



- 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: 1979 - 1983

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

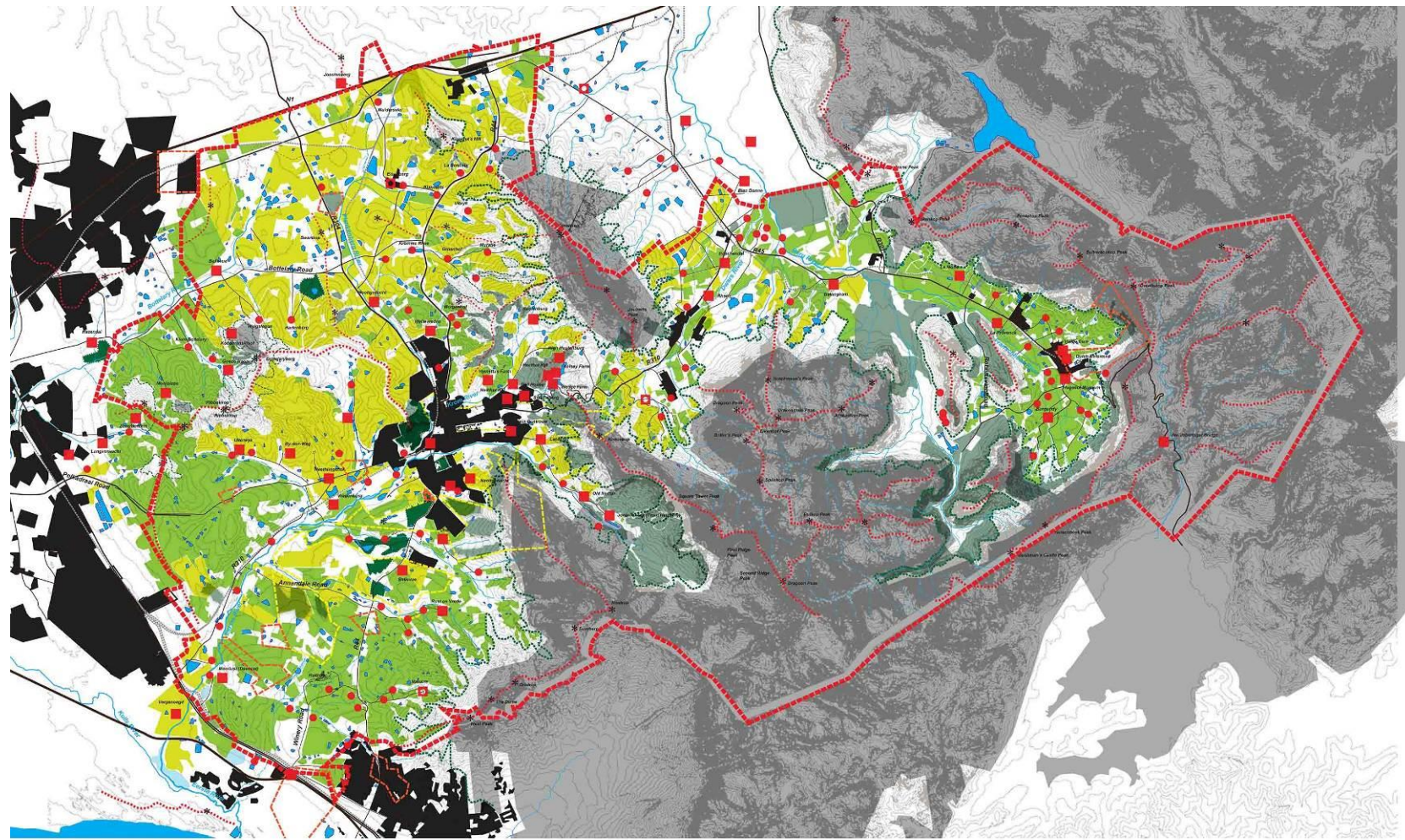


Figure 4.6



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

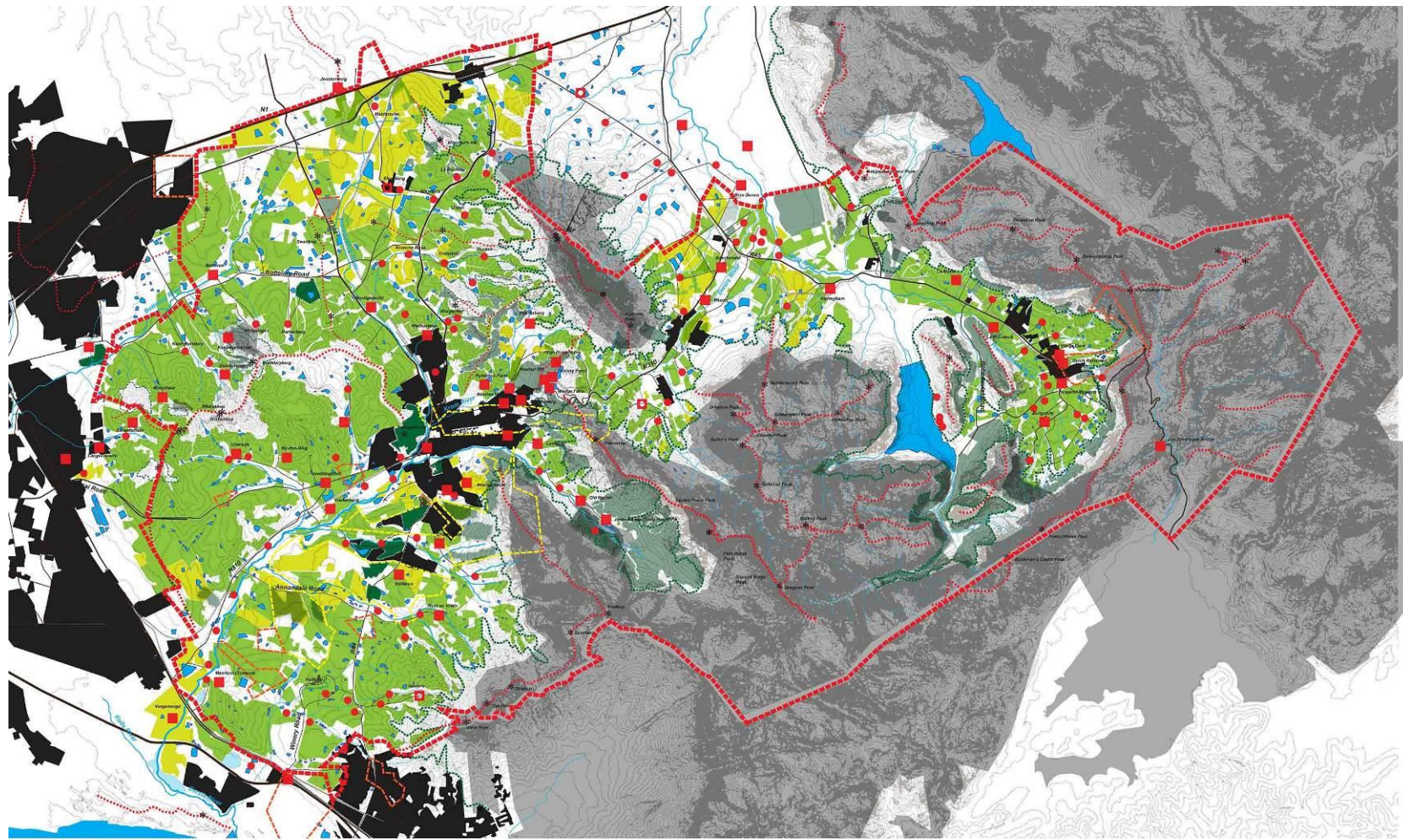


Figure 4.7



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

5. SYNTHESIS AND FINDINGS

To bring together the strands of the 'natural' and 'cultural' enquiries undertaken has involved far more than simply overlaying the respective spatialised information gathered as part of this and related projects (such as the Drakenstein Municipality Heritage Inventory). It has also involved very considerable fieldwork by all members of the core professional team over the past months and weeks; consultation with colleagues and consultants; as well as consultation with others, such as Dr. Hans Fransen, an acknowledged authority on historic Stellenbosch and the towns, villages and homesteads of the Western Cape; and review of current protections in place.

As noted in the Introduction to this report, comments received on the original Phase 2a report of mid-November last, as well as a range of considerations relating to better connecting heritage significance of extensive areas of the Rural Domain in the Stellenbosch Municipality with practical management, discussed since within the project team, have also had an effect on the synthesis contained in this revised Phase 2a report.

In recent days, we have also examined the Final BAR for the 'Proposed Improvements to the R44 between Somerset West and Stellenbosch', DEA&DP reference: 16/3/1/1/B4//45/1005/13. We record that we are party to comments and objections thereto that are being lodged by the Cape Winelands Cultural Landscapes Working Group under the chair of Sarah Winter, by the 30th January 2017. This is because the proposals are not remotely in keeping with the landscape and other heritage resources of the setting.

Figure 2 (augmented by Figure 3.2 and Figure 3.4) clearly illustrates the various **Valleys** within the Study Area. These Valleys all display distinctive landscape character, as they are 'worlds' that are spatially defined by mountain slopes and often feature different vegetation types, settlement patterns and human activities. In turn, within these Valleys, a number of smaller, highly distinctive areas have been noted during the course of the fieldwork exercise. These comprise different Landscape Units (each possessing distinctive character) within the study area. The Valleys are illustrated in Figure 2 and the Landscape Units will be defined as part of the Phase 2b work.

Over and above the natural landscape features and the cultural attributes identified in the foregoing, there are a further range of factors that add to the heritage significance of the resources, including the following:³⁵

- Areas of scenic value, where the juxtaposition and combination of the natural features in relation to each other increases their scenic and natural heritage significance.
- Rural Farmland contributes to the particular character and ambience of much of the Stellenbosch Municipal Area and has historical meaning relating to the origins of settlement in the region. Significantly these pockets of farmland on productive soils almost exactly mirror the areas of weathered granites and shales in the foothill zones.
- Nature reserves, which because of their protected status, increase the significance of the natural and scenic resources of those areas. The Stellenbosch Municipal Area falls within the Cape Floristic Kingdom World Heritage Site, which has international status, and includes a number of smaller reserves and conservancies.
- Scenic corridors occur along scenic routes, and have particular significance where these interfaces with areas of high scenic value. The routes tend to have regional or local significance, and include the Klappmuts Road (R44), Klipheuwel Road (R304), Bottelary Road (M23), National Road (N1), Helshoogte (R310), Polkadraai Road (M12), Baden Powell Road (R310), Strand Road (R44) and Franschoek Road (R45).³⁶

In turn, and as a consequence of quite a number of draft iterations, all these considerations and evidence have led to further examination of the relevant data. In particular, we have closely scrutinised the synthesised information emerging from the spatial overlay of:

- The Natural Constraints (fig. 3.7);
- Development of the Cultural Landscape 2010 (fig. 4.7);
- Sense of Place (fig. 5).

³⁵ Overstrand Heritage Landscape Group (2009).

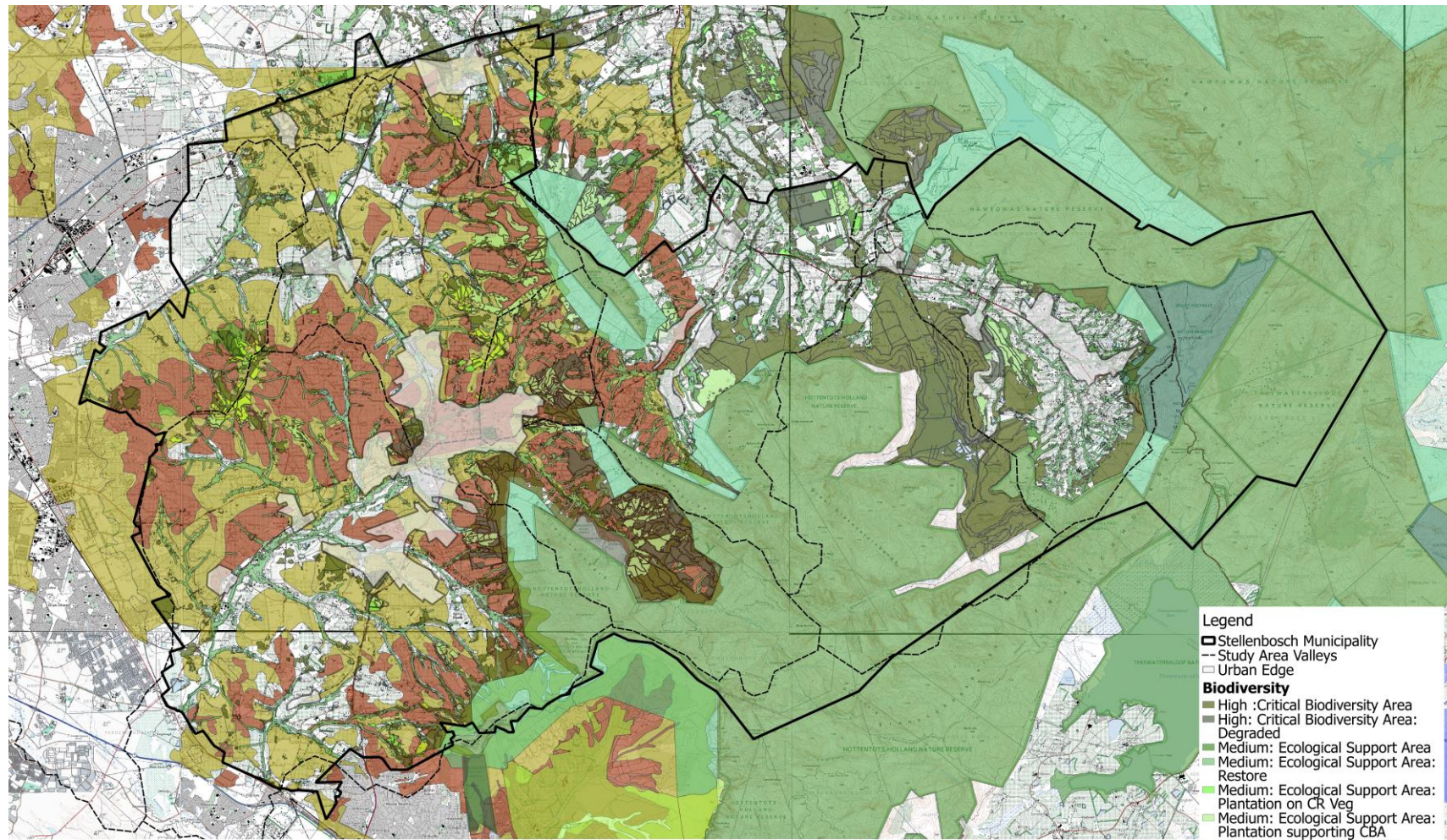
³⁶ Winter, S and Oberholzer, B (2014).

Our findings, applying all the relevant criteria in terms of the NHRA and the UNESCO guidelines, are illustrated in Figure 6, which indicates those geographic areas that are significant in terms of their heritage value. We propose that these areas should be protected, hence their inclusion in the Heritage Areas, as shown in the figure.

Figure 6 also indicates the position of the existing Protected Areas and has taken cognisance of the proposed Grade 1 Heritage Area of the Drakenstein Heritage Survey³⁷. When considering the location and extent of the proposed Heritage Areas, it is obvious that the core of the study area around Simonsberg has the highest heritage value, both to the north-east and to the south-west. Each of these already has a Declared National Heritage Site within it, the 'Founders' Estate' and 'Ida's Valley', respectively.



³⁷ Drakenstein Landscape Group (2012)



- Legend**
- ▭ Stellenbosch Municipality
 - - - Study Area Valleys
 - Urban Edge
- Biodiversity**
- High :Critical Biodiversity Area
 - High: Critical Biodiversity Area: Degraded
 - Medium: Ecological Support Area: Restore
 - Medium: Ecological Support Area: Plantation on CR Veg
 - Medium: Ecological Support Area: Plantation supporting CBA
 - Medium: Other Natural Area
- Protected Areas**
- Mountain Catchment Area
 - Local Authority Nature Reserve
 - Provincial Reserve
 - State Forest Nature Reserve
 - Protected Natural Environment
 - Private Nature Reserve
- Soil Suitability**
- High
 - Medium



Figure 3.7
LANDSCAPE FEATURES: NATURAL CONSTRAINTS



Source: Western Cape Department of Agriculture

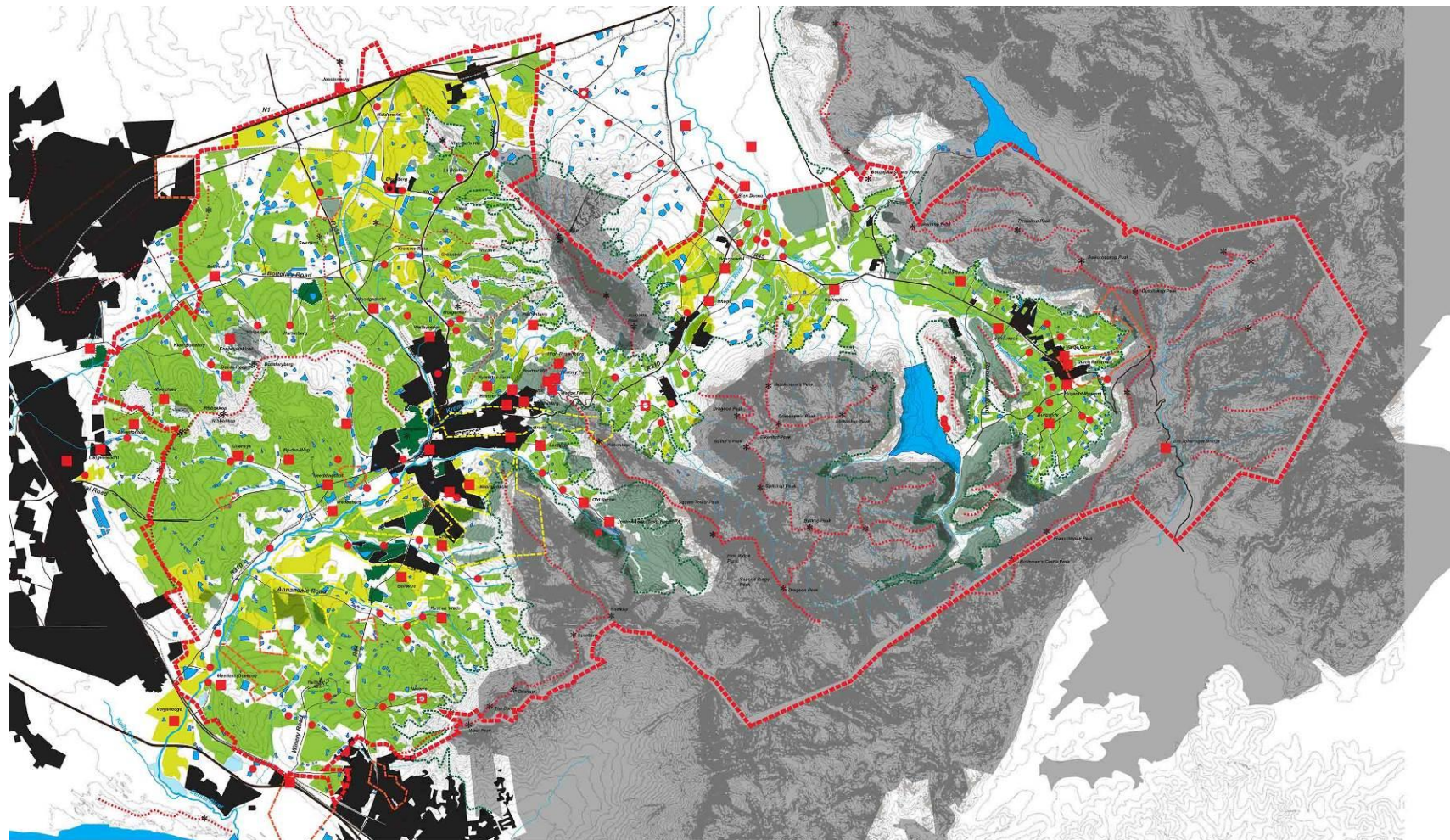


Figure 4.7



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

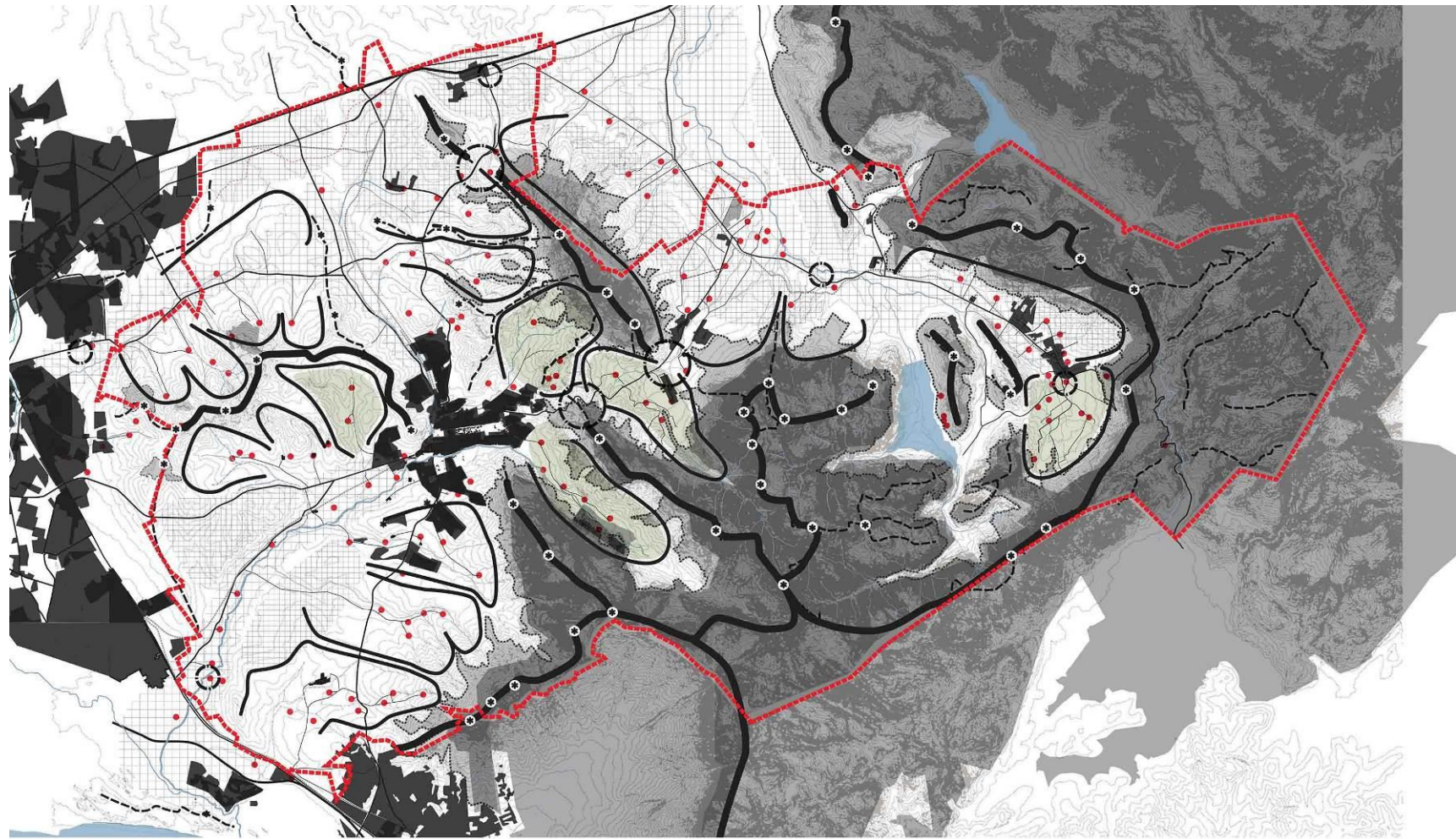


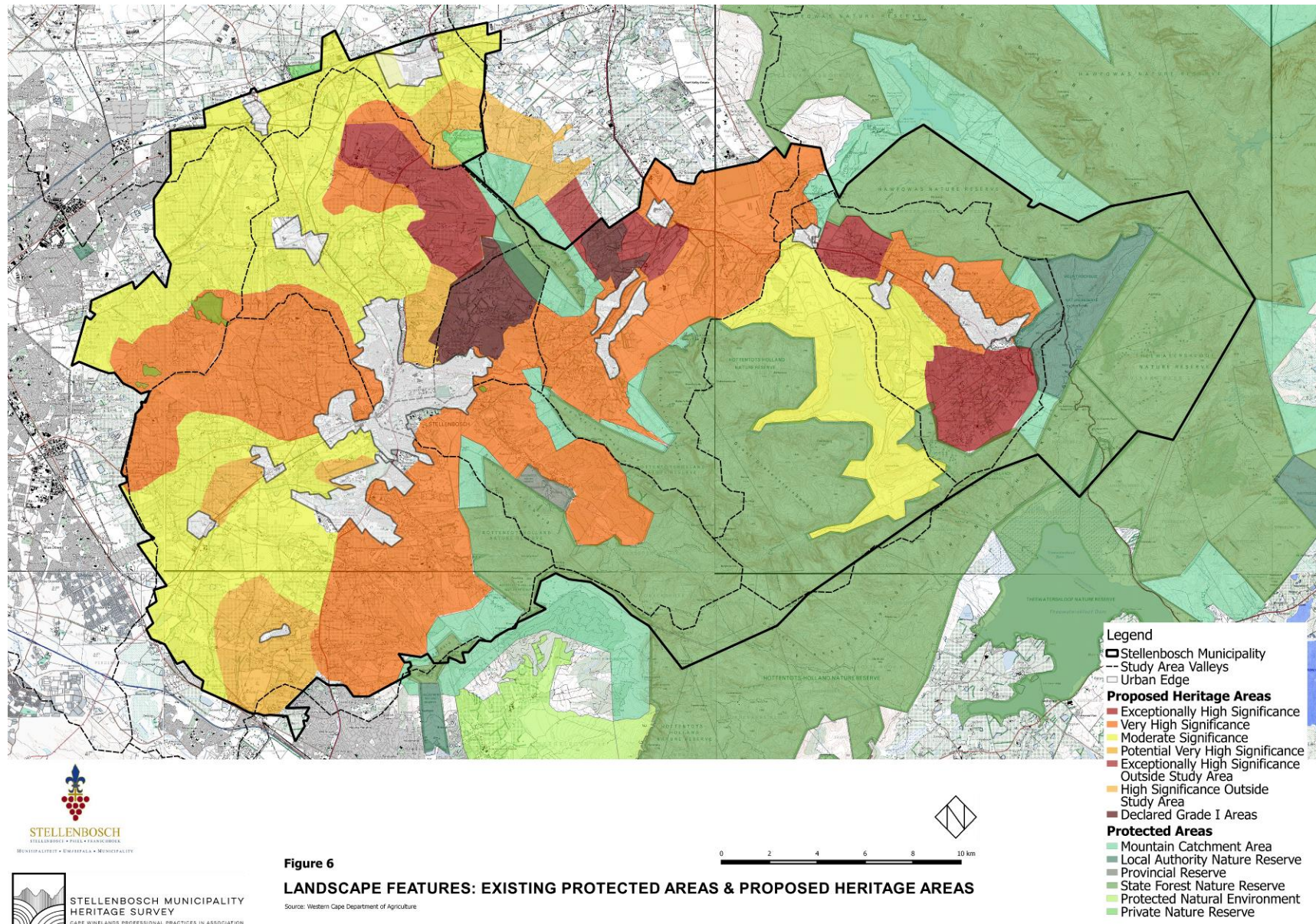
Figure 5

SENSE OF PLACE



Legend

- Stellenbosch Municipality
- Crestlines
- + Peaks
- Wilderness
- Rivers
- Roads
- Railway Lines
- Urban, Suburban and Peri-urban
- o Gateway Spaces
- Valley Spaces/Sense of Enclosure
- Valley Bottoms/River Corridors
- Gently Undulating Hills
- Heritage Sites
- Landscape "Rooms"



6. RECOMMENDATIONS

This report has been prepared in the context of the strategic and urgent need of the Stellenbosch Municipality to become compliant with the provisions of the NHRA as soon as possible, as it contemplates the production of (or amendment to) various human settlement and transportation planning proposals in its area of jurisdiction.³⁸ As a consequence, the focus of this phase of our work as consultants to the municipality has been the identification of significant heritage resources embodied in large-scale landscape areas of the Rural Domain of the municipality. This is because significant developments currently being proposed in that domain (whether formally or informally and irrespective of whether they have been or are initiated by the municipality itself or by private developers) are required to be informed by the tangible existence of surviving significant heritage resources in that domain. In any event, we also suggest that the presence of the relevant heritage resources is germane to sustaining the very character and economy of the Stellenbosch Municipality, even when considered in an innovative vision.

An appropriate Inventory of Heritage Resources is required. Moreover, the inventory has to be approved by the agencies statutorily responsible: in this case the Heritage Western Cape (HWC) (for Grade II and Grade III resources and areas).³⁹

Therefore, and as a consequence of the foregoing, during the course of January 2017 we are lodging this revised report with HWC and recommend that:

- Figure 6 and the Schedule of Heritage Resources in the Rural Domain, contained in the report as Appendix 4, be considered for approval by the IGICom of HWC, with this report being the motivation therefor.

We record that on the 14th November 2016 we made copies of the original version of this report available to the Stellenbosch Municipality, as

³⁸ As previously stated in this report, this is required in terms of the National Heritage Resources Act.

³⁹ We note that Grading as an activity has no impact on land ownership rights. Impacts on rights only come with formal protection.

well as to registered Conservation NGOs in the Stellenbosch Municipality, with the request that they provide us with written comment thereon by the 14th December 2016. Comments have been received and have led to revisions in the terms set out in the Introduction to this report and in Appendix 4.

Following the approval of the draft Heritage Resources Inventory in the Rural Domain, or otherwise, by HWC, the findings will be revisited and included in any further revised form in the final Phase 2 report of this project that is planned to be completed towards the end of July 2017.



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8. APPENDICES

APPENDIX 1: SOCIO-CULTURAL TIMELINE BY TRACEY RANDLE

APPENDIX 2: PALAEOLOGY AND ARCHAEOLOGY FRAMEWORK BY DR. ANTONIA MALAN

APPENDIX 3: HWC GUIDELINES FOR GRADING: MANAGEMENT AND IMPLICATIONS

APPENDIX 4: PROPOSED HERITAGE SCHEDULE

APPENDIX 5: COMMENTS RECEIVED ON OUR ORIGINAL PHASE 2a REPORT BY THE 14th DECEMBER 2016