

STATUS QUO TECHNICAL NOTE

URBAN DESIGN

South Eastern District Local Area Plan



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This technical note represents part of the Phase Two Deliverable for the South Eastern District Local Area Plan.

Contract No SCM 66 of 11/12

Prepared for:

Msunduzi Municipality



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Final Draft Report August 2013

1 Introduction

1.1 PURPOSE AND APPROACH

The purpose of this technical note is to assess the spatial and physical characteristics of the study area in terms of its natural, settlement and built form characteristics. The assessment synthesizes the current reality of the place from a qualitative perspective, as well as how it functions as a place for people.

The intention of this situational analysis is:

- Firstly to develop an overall spatial perspective of the study area in terms of its natural and urban context, and
- Secondly to assess main settlement areas or nodes viz. Ashburton / Lynnfield Park and Shenstone / Ambleton in terms of its urban structure, built form, public spaces and places as it relates to use by people.

The outcome will seek to highlight unique qualities of the study area as well as its key development challenges drawing out strengths, issues, problems, and potentials in terms of the above.

This Technical Note forms part of the status quo analysis of the study area and needs to be read in conjunction with the technical notes for:

- Planning
- Economic
- Transportation
- Environment
- Infrastructure
- Finance

1.2 THE STUDY AREA

As per the Terms of Reference, the SEDis study area is located along the southern edge of the Msunduzi Municipal boundary and includes the farmlands in and between Shenstone/Ambleton and Ashburton/Lynnfield areas. The study area borders onto Mkhambathini Municipality in the East, and Richmond Municipality to the south.

1.3 SECTORAL PROCESS AND METHODOLOGY

Current Spatial Policy informants at a District and Municipal level were analysed in order to understand the spatial policy context of the study area. This was followed by a spatial

assessment of the study area done predominantly through a visual analysis as well as a photo survey of the area. Findings were clarified and augmented through discussions with the local planning team.

The site survey confirms trends, issues, problems and potentials as they are currently and also assists in the critical analysis of recommendations that have emerged from previous studies.

2 Policy Environment

2.1 LEGISLATION/POLICY

The legislative and policy context is elaborated in the Planning Technical note and sets the context for the urban design analysis and assessment.

2.2 SECTORAL PLANNING FOR STUDY AREA

Key local planning / strategy documents relevant to the South Eastern District and which need to inform the spatial and urban design analysis of the study area are:

- Msunduzi Spatial Development Framework Review (July 2009)
- CBD, Ashburton and Eastern Areas Area Based Management: Spatial Development Review (March 2010)
- Ashburton Town Planning Scheme (May 1997)
- Shenstone / Ambleton Concept Development Framework Plan Draft (April 1998)

2.2.1 MSUNDUZI SDF REVIEW (2009)

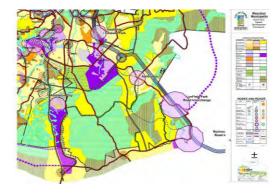


Figure i. Msunduzi Spatial Development Framework Extract: South Eastern District Spatial Development Framework

Relevant terminology and application to the study area:

SDF STRUCTURING [DEFINITION	RELEVANCE TO SEDIS
ELEMENT		
Tertiary Nodes L	Lower order node	Ashburton has been identified as a Tertiary
V	with potential for	node in the study area. With increased
r	mixed-use	densities envisaged for this node, it is
C	development serving	anticipated that this neighbourhood cluster
t	the local community	of shops will develop into a stronger node
		and provide a variety of services.
Proposed Nodes T	These are emergent	Ambleton City has been identified as an area
r	nodes where mixed-	where socio-economic development
l	use developments	opportunities are to be encouraged.
V	will be encouraged in	Allowance should be made for commercial
a	and around the node.	developments, mixed use commercial/
		residential developments, medium density
		residential developments, as well as social
		facilities to augment existing facilities.
		Shenstone Multi-use Node: This regional
		level node has been identified as having
		potential to be a catalyst for development
		that will achieve the objective to integrate
		the city. The node will comprise shops,
		offices, institutional and administrative/
		community uses as well as higher density
		housing. The node also abuts a proposed
		industrial area and residential area. It will
		connect to a major arterial and proposed rail
		station.
	Areas where socio-	Two areas have been identified:
Opportunity points	economic	 Richmond / Umlaas Interchange
C	development	 Lion Park / Lynnfield Park Interchange
	opportunities are to	Areas are shown to have an unprecedented
t	be encouraged, as	demand for development of land. They are
V	well as creating	centrally located and accessible and still have
	employment	'bushveld' qualities with large areas of
	opportunities which	natural bush. The main potential identified
r	may take place at a	are for commercial, residential and mixed-

	higher density than in	use development.
	other areas.	

2.2.2 CBD, ASHBURTON, EASTERN AREAS AREA BASED MANAGEMENT: SPATIAL DEVELOPMENT FRAMEWORK (2010)

Proposals in this study echo the key concepts outlined in the Msunduzi SDF Review document. Further recommendations and issues for the study area are as follows:

N3 CORRIDOR: Opportunity points identified at key intersections or off-ramps along this route in the study area are: The Richmond / Umlaas Road Interchange, the Lion Park / Lynnfield Park Interchanges as well as the Ashburton Off-ramp. Actions identified include the preparation of development plans for lands adjoining the aforementioned ramps.

SETTLED AREAS: Ensuring greater densities and integration of landuses along corridors creating a range of choice and a vibrant environment. Major routes identified within the study area include: Old Main Road /R103

HOUSING: The following key issues were identified:

- Location of low cost housing closer to places of employment in the Mkhondeni / Shortts Retreat Industrial Areas.
- The need to identify suitable land for the development of rental housing
- The need to put in place and implement Slum Clearanace Programs and to provide low cost housing in appropriately located areas.

INDUSTRIAL AREAS: The Mkhondeni / Shortts Retreat area is reaching capacity and additional sites are required. Potential sites within the study area include the Foxhill plateau. The Ukulinga Farm is also mentioned as a potential opportunity for industrial expansion subject to negotiations with the University of KwaZulu-Natal. Clean industries are recommended for this area due to proximity to the Mpushini and Mkhondeni conservation corridors.

CONSERVATION CORRIDOR: Required actions include the linkage of the Mkhondeni and Mpushini conservation corridors to the Bisley Valley Nature Reserve. It is proposed that abutting development should be limited to estate type residential development, which is structured in the form of clusters that are set into the indigenous vegetation.

TERTIARY NODES: Mkhondeni and Ashburton are identified as tertiary nodes, for sustaining of existing shopping facilities and encouragement of higher order services.

PROPOSED NODES: Within the study area, the following proposed nodes are identified. It is proposed that the identified nodes should include commercial developments, mixed-use residential developments, medium density residential developments and social facilities including post offices, police stations, clinics and schools:

- A node on the western boundary of the Ambleton residential development on one of the proposed ring roads and adjacent to Unit EE
- A node on Thornville Road to the south of Bisley Valley Nature Reserve at a new crossroad to be created by a new ring road.
- A node to the south east of the Bisley Valley Nature Reserve at an intersection of two proposed ring roads; and
- A node to the south of the Mkhondeni River at the intersection of two proposed ring roads.

The report also makes reference to key recommendations from the Ashburton Integrated Development Plan. According to the report, identified high, medium and low strategic focus areas for Ashburton are:

- High: the formulation of a landscaping plan;
- High: the identification of potential linkages with the Mkhambathini Tourist Development Corridor and other tourist routes which are developing in the region;
- Medium: drafting of a development and landscaping plan for the main business area;
- Medium: facilitating the development of tourist related developments in Ashburton;
- Medium: the provision of additional sports facilities to accommodate sports codes;
- **Low**: the identification of a cemetery site;
- Low: the need to accommodate the demand for additional erven.

Other strategies with spatial implications include:

- The development of an integrated network / trail providing linkages between all existing equestrian activities.
- The establishment of linkages with the Bisley Nature Reserve, Nagle Dam and Mkhambathini Eco-tourism Corridor.
- To direct the construction of any new social and recreational facilities to the three identified nodes which are located off Old Main Road (MR103). These include Ashburton, Lynnfield Park and the Umlaas/ Richmond Interchange.

2.3 Key Development Principles / Directives

The following development and/or other principles are articulated across the key policies and legislation governing development in the study area.

GUIDING PRINCIPLES	APPLICATION TO SEDIS
Compaction	Infill development within existing nodes to create a coherent system
Urban Integration	Shenstone and Ambleton are seen as areas to integrate low Income residential areas into city New economic opportunities in growth areas and adjacent to major roads such as the N3 and its new interchanges at the Lynnfield Park / Lion Park Interchange & the Richmond / Umlaas Interchange New E-W and N-S roads links to major parts of city
Urban Densification	Adjacent to major nodes identified
Restructuring of the City	 Creating a Polycentric City with new nodes and new economic opportunity areas Limited mixed-use activity spines between focus points Redressing imbalances with improved infrastructure and new economic opportunities Creating a road system matrix
Meeting Land Use Needs and	New Residential areas particularly in the Shenstone /
Identification of areas of	Ambleton area
economic development potentials	 New economic opportunity areas, especially in those areas, which were previously excluded from the mainstream economy
Sustainability	 Protecting environmentally sensitive areas Coherent and reinforcing infrastructure Protecting agriculture potential areas Upgrade residential areas with appropriate infrastructure In situ upgrading of Informal settlements
Creating a quality urban	Create a polycentric city
environment	Create a mix of housing types in different areasReinforce public transport system

3 Assessments

3.1 OVERALL SPATIAL PERSPECTIVE

3.1.1 SETTLEMENT IN NATURE

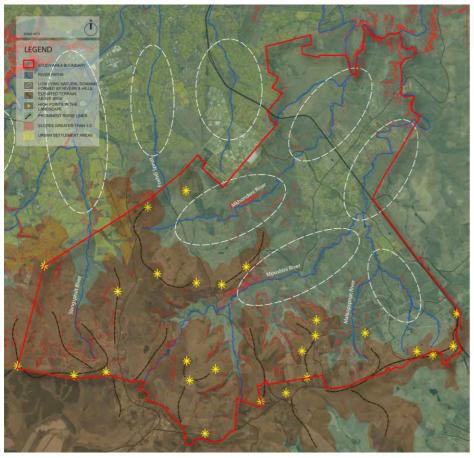


Figure 1: Natural Structure

The study area is drained by a number of rivers including the Msunduzi, Mpushini, Mhondeni, Slangspruit, Foxhill Spruit and Malkopspruit Rivers (See Figure 1 above). The course of the rivers has not been majorly modified and natural vegetation varies from bushed grasslands to bushland and bushland thicket. A number of low-lying natural domains created by the rivers

and surrounding hills are found in the lower lying north-eastern parts of the study area. Urban settlements have predominantly taken place in this part of the study area, with the exception of Ambleton which has been developed in the higher lying western part of the study area. The entire southern and south-western parts of the study area are formed by a continuous mountain range with elevations higher than 800m above sea level. The central undeveloped areas consist predominantly of farmlands and cultivated areas as well as demarcated Nature and Game Reserves. The varied topography provides for a diversity of views and vistas over the natural landscape.



Figure 2: Natural river domains



Figure 3: View of the higher lying mountain areas to the south west of the study area

Potentials and problems:

The greater part of the study area consists of pristine landscapes, the natural character and quality of which need to be preserved as a unique asset. Settlement has taken place largely in a

sensitive manner with settlements forming discreet pockets within the landscape. Current development trends and pressures need to be assessed so that these are appropriately managed, protecting quality and character of the area.

3.1.2 URBAN STRUCTURE

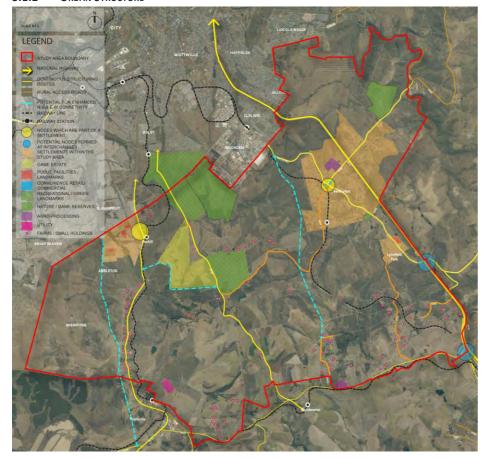


Figure. 4: Urban Structure

The study area lies on the N3 south of Pietermaritzburg en-route to Durban. The two older settlements in the area viz. Ashburton and Lynnfield Park are located alongside the N3. The towns were historically formed on the old alignment of the N3, the R103 / Old Main Road, which is the lower order integrative route connecting to employment opportunities and retail

facilities in nearby Mhondeni / Shortts Retreat. At a local level, N3 currently functions as a barrier and edge to the study area and fulfils the function of high-speed connectivity to the greater region.

A number of north south arterials traverse the study area including the Richmond Road/ R56 , the Bisley Road /P120 and the R103 / P1-5. The township settlement of Ambleton is located to the west of the P5-4 and is the only other formal settlement on site. The settlement was formed in 2002/2003 in terms of the Less Formal Township Establishment Act of 1991. The Shenston area south of Ambleton is also publicly owned and largely undeveloped but characterised by rapidly advancing informal development.



Figure 5: Character of the N3 towards Pietermaritzburg

Two railway lines run through the study are in a N-S alignment. The line from Mkondeni runs to Camperdown along the eastern side of the study area and has one station stop at Ashburton to the south of the settlement. The railway follows a scenic route and passes over the Mkondeni Viaduct, which forms a landmark in the area. The second line runs from Camp's Drift and runs south through Foxhill / Ambleton towards Thornville & Richmond. The only station within the study area on this line is at Foxhill, the next station being just south of the study area at Thornville.



Figure 6: The Mkondeni Viaduct (Source: Google Earth)

The central part of the study area consists mainly of farms with a concentration of small-holdings occurring along the main arterials viz. the P5-4 and the P 338 along the southern border of the study area. The Bisley Valley Nature Reserve and another privately run Game Reserve to the north east if the P 120 form important recreational landmarks in the area. The Intaba Ridge is a recent privately developed Game Estate located to the west of the P120 and to the immediate north of the D532 in close proximity to the two game reserves in the area. Other recreational landmarks in the study area include the Ashbuton Race Course & Training Centre as well as the Rivers Edge Equestrian Centre also located in Ashburton.



Fig 7: Bisley Valley Nature Reserve (Source: Google Earth)

The Ukulinga Research & Training Farm is a 400 ha farm undertaking research and training in several agricultural disciplines. The farm is located within the study area to the south west of Mkondeni and forms an important landmark in the area.



Figure 7: The Ukulinga Agricultural Research Centre (Source: http://beeh.ukzn.ac.za)

3.2 ASSESSMENT OF KEY SETTLEMENT AREAS

3.2.1 ASHBURTON / LYNNFILED PARK

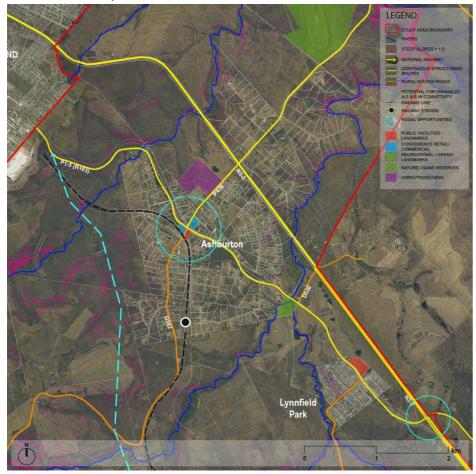


Figure 8: Ashburton and Lynnfield Park – Natural & Urban Structure

a) Ashburton:

Structure & Grain: Historically developed as agricultural small—holdings, the character of Ashburton was originally of a rural-residential nature supporting a small agricultural community. Plot sizes are based on this residential type with average plot sizes varying between 40mX75m, 40m X90m, and 90m X 250m in plots to the west of the railway line.

Layout is typically suburban in nature with little interconnectivity, legibility or pedestrian permeability.

<u>Built form character:</u> Urban densification and intensification within Pietermaritzburg and its immediate surrounds has seen the gradual influx of affluent families seeking a lower density residential environment into the Ashburton area. As a result free standing mansions and cluster homes are seen emerging in the area. In these instances, plots are no longer being used for agriculture purposes, thereby negatively affecting the rural-agricultural character of the area.



Figure 9: Ashburton – Older residential type



Figure 10: Ashburton – Emerging residential type



Figure 10: Ashburton – Mixed Use at the R103 & P478 Intersection

<u>Public Spaces and Places</u>: The public environment at the main commercial / public facilities node at the intersection of the R103 & P478 / Pope Ellis Drive is run down. Built interfaces onto the main route are lacking in quality and attractiveness. Dumping is seen fronting onto the main road on P478. Whereas private facilities, buildings and spaces are well maintained and cared for, public areas and streets are largely neglected and appear lacking in collective ownership.



Figure 11: Dumping outside the Pick and Pay building on Wally Hayward Drive

The area is popular for equestrian trails and activities with the Ashburton Race Course being an important landmark in the area. Historically, many of the residents owned horses / stables. A large private horse-riding centre is seen on the R103 to the south east of Ashburton. The area

is however lacking in schools and limited in other public facilities though a well-used library is located at the main intersection. The strategic location of Ashburton in relation to road and rail access presents an opportunity to build on the tourism attraction in the area. Settlement upgrade through introduction of greater retail and public facilities are needed to better serve the local community.

b) Lynnfield Park

Structure and Grain: Previously administered as a separate development area, the settlement of Lynnfield was incorporated into the Ashburton area in the early 90's. The different nature of origins of the two settlements is evident in the structure and built form of the settlements. The structure of Lynnfield Park is more urban in nature with a grid network and block structure. Plot sizes are long and narrow conducive to the development of a range of residential types. Average plot sizes vary from 20m X 80m to 20m X 90m/100m. Strategic location due to the Lynnfield Park Road Interchange presents an opportunity to revive this node in a manner that is sensitive to its environmental context.

<u>Overall character:</u> The settlement is primarily residential in nature. Residences are mostly of the free standing type. As plots are substantially set back from the street, urban interface is poor. Public spaces are poorly maintained and street edges are overgrown and unkempt.



Figure 12: Lynnfield Park – Residential Type

<u>Public Spaces & Places</u>: A newly developed Church on the northern entry into town forms a visible landmark in the area. Other public facilities are limited and few and far between. The overall run down nature of the public realm gives the settlement a neglected look and feel. The

area is in need of public intervention and maintenance to improve the range and quality of facilities available here.

3.2.2 SHENSTONE / AMBLETON

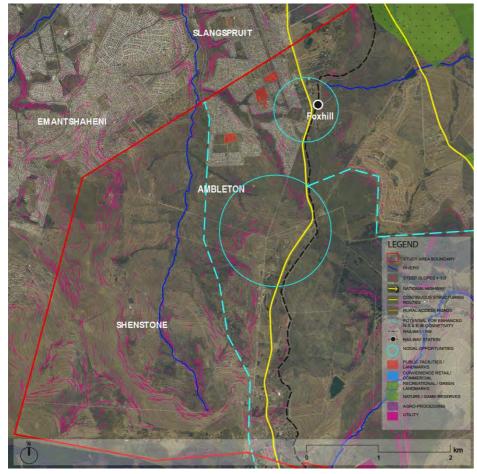


Figure 13: Shenstone and Ambleton - Natural and Urban Structure

a) Ambleton

<u>Structure & Grain:</u> Ambleton is a densely developed settlement established as a Less Formal Township in order to accommodate some of the development pressures in the Slangspruit area

at the time of development (Shenstone /Ambleton Concept Plan, 1998). The structure of the settlement is suburban in nature and has a number of spatial and land use problems. The structure is primarily a single point access layout from the R 56 / P5-4 limiting opportunities for mixed-use development.

The layout similarly offers limited pedestrian / vehicular permeability or interconnectivity especially across the river system that flows through the settlement. Public facilities are mostly embedded inside the area with limited exposure and accessibility. The location of the rail line alongside the settlement presents opportunities for mixed-use development especially at the Foxhill Station on the eastern edge of Ambleton. Greater connectivity with the rest of the study area needs to be looked at in order to create opportunities tied to greater access and interdependence.



Figure 14: Ambleton - Urban Character

<u>Built form character</u>: The built form consists predominantly of housing stock. Plot sizes are 10m X 16m with the 30sqm housing stand located centrally on the site. The character of the area is monotonous and uniform with little diversity in form or use. There is no distinction between public or private space as a result built interface onto the street is negative and there is little ownership of space. Makeshift spaza shops with a small verandah with seating are seen alongside road edges. These are points of meeting and exchange in the community.



Figure 15: Ambleton - Built form character

<u>Public facilities and public realm</u>: The public realm is lacking in facilities for pedestrians who are the majority users in the area. The road edge drainage system implies that pedestrians are frequently forced to walk in the wet. There are no sidewalks or shelter for pedestrians waiting for public transport. Recreational amenities and facilities are limited and public facilities consist of a school, clinic, Police Station and church. Dumping is rampant on most street corners and refuse removal appears to be an issue.



Figure 16: Ambleton - Public Realm



Figure 17: Ambleton – Ubiquitous Dumping

b) Shenstone

The Shenstone area is predominantly undeveloped with the exception of a linear strip of low-density smallholdings, which are found along the R56 south of Ambleton towards Thornville. The area is also rapidly being encroached on by informal settlement.

The built form character is of a rural nature with homesteads comprising a formal building and one or more traditional huts.



Figure 19: Shenstone – Smallholdings along the R56

Though the area is environmentally sensitive and has undevelopable areas characterised by steep slopes greater than 1:3, Shenstone presents an opportunity to develop and showcase a new sustainable economic node, which could start to address some of the historic & developmental challenges faced by this area.

4 KEY FINDINGS

Urban Design Issues	Key Findings
Nature, character and extent of proposed growth & development within SEDis	 The SEDis area possesses a wide range of character zones of of unique natural significance. This offers the potential to create diverse opportunities for lifestyle and residential choice – ranging from urban to peri-urban and rural. It is therefore critical that the roles, character and opportunities for various settlements are clearly defined into the future in order to ensure preservation of unique and positive qualities of each node and relevance to local communities. The need to identify edges to each of the settlement nodes within SEDis in order to ensure that development occurs in the form of well connected, decentralised nodes as opposed to continuous corridors which start to erode the character and quality of individual settlements and the area as a whole. The central undeveloped areas and farms in the study area exist within key open spaces and natural systems. The area needs to be classified into areas suitable for development, protected nature areas, and transition zones - which will provide landowners and developers clear guidance for the appropriateness of development. The emergence of Game Estates as a new 'type' of settlement needs to be critically assessed.
Character of development on the N3 Corridor	 Broader policy informants identify a number of economic opportity points on the N3 corridor south of the Mkhondeni Industrial Node as well as at the Richmond / Umlaas Interchange & the Lion Park / Lynnfield Park Interchange. The rural character of historic agricultural / residential settlement areas such as Ashburton and Lynnfield Park which are located alongside the N3 corridor is at threat due to the strategic economic roles identified for the area. It is evident that there is a gradual eroding of key natural and settlement qualities in the Ashburton area due to changing land use patterns and development pressures, which have resulted in lack of direction in the approach to development. As a transition area from the urban centre of Pietermaritzburg to

	the natural / rural hinterland of the District, any form of development which takes place along the N3 will need to be carefully assessed so that development is in character with the qualities of the broader area.
Varying needs requiring varying levels of intervention	 The nature of needs in the different settlements is varied requiring different kinds and levels of intervention in each area: While the Ashburton / Lynnfield Park is at a risk of losing 'sense of place' and 'character' due to the run down nature and changing nature of new approved developments within Ashburton itself, areas like Ambleton are in severe need of basic amenities and facilities that will help improve the day to day quality of life of local residents. Shenstone and Ambleton represent areas of dire need for socioeconomic opportunity, connectivity and public realm upgrades. These areas also require greater exposure in terms of access and linkage to the rest of the study area. The Shenstone area presents opportunity for strategic 'greenfields' development that will unlock economic opportunity in the area. Ashburton / Lynnfield Park being 'transition' areas moving from the city to the rural hinterland, these areas need greater development control and quality control with respect to built form and landscaping requirements along the public interface. The area also requires the careful assessment of opportunities so that these are
	 in line with the character of the broader area. The public environment in all settled areas is in need of upgrade
Public Environment	 and improvement. Litter and dumping of refuse is a severe problem especially in the Shenstone & Ambleton area. Lack of adequate refuse removal and appropriate facilities for storage of refuse is an issue, which seriously affects the quality of the public environment in all settlements.

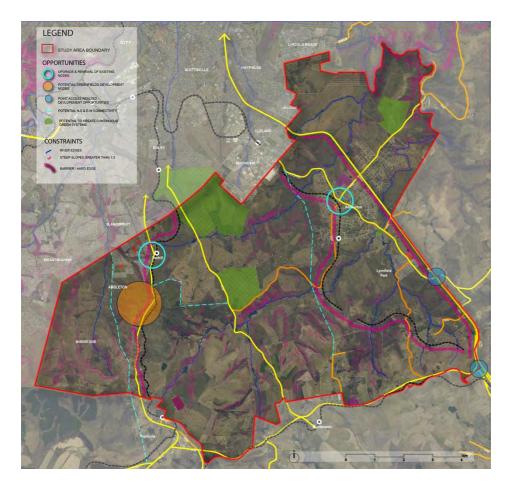


Figure 20: Summary of Opportunities and Constraints

5 REFERENCES

- 1. Ashburton Town Planning Scheme, May 1997
- CBD, Ashburton and Eastern Areas ABM: Spatial Development Framework Review, March 2010
- 3. Msunduzi Spatial Development Framework Review, July 2007
- 4. Msunduzi Municipality: Preparation of Local Area Plans and Allied Planning Work For South Eastern District Terms of Reference, 2012
- 5. Shenstone / Ambleton Concept Development Framework Plan Draft, April 1998