11. GREYTON

11.1 TOWN ANALYSIS

11.1.1 OVERVIEW

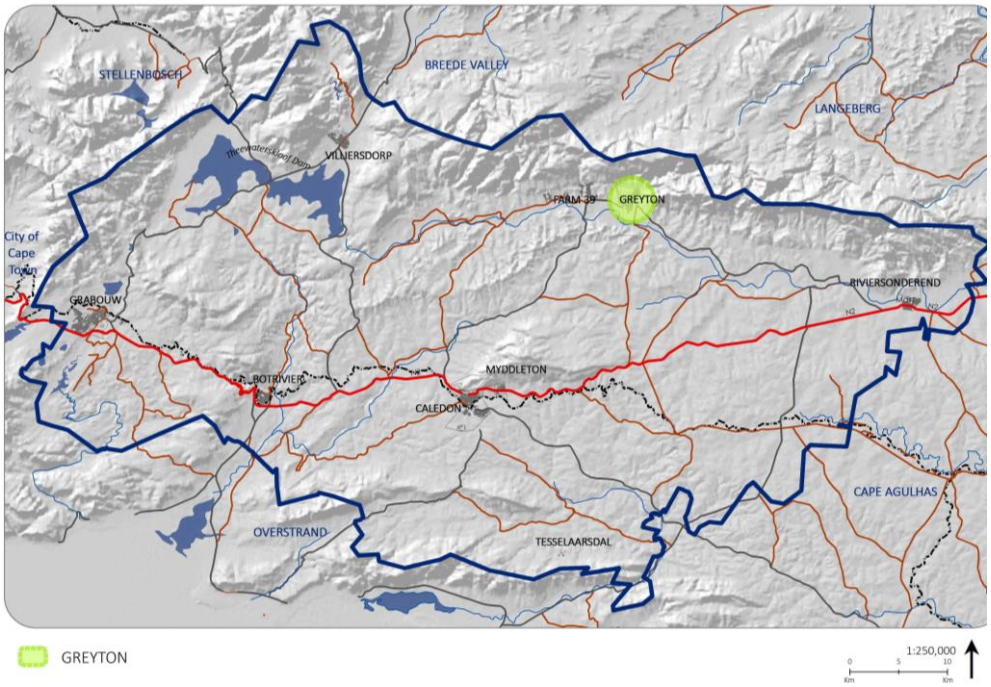


Figure 11.1: Location of Greyton within TWKM

- Greyton's function within the municipal context is that of a rural village and has established itself as a popular 'lifestyle' village and popular property investment destination. The unique characteristics of Greyton include:
  - tourism destination;
  - historic precinct and rural character of the village;
  - pristine natural setting.
- The protection of the unique village character is a critical informant to the spatial policy for the town. The challenge will be to retain the unique rural and historic character of the town while meeting the requirements for densification and new subsidised housing.

Table 11.1: Greyton at a Glance

Greyton at a Glance	
Total population	2 780 (2011 Census) 3 271 (2018 MYPE)
Growth rate (2011 – 2018)	2.4% per annum
Role and function	Agricultural service centre Lifestyle village
Settlement classification	Secondary regional service centre
Comparative locational advantage	Tourism destination Historic precinct Country town character Natural setting Tourism accommodation
Economic base	Agriculture Tourism
Growth potential (GPS, 2014)	Medium growth potential Very low socio-economic need
Housing backlog	306 persons

11.1.2 HISTORIC BACKGROUND

Greyton is situated in the Riviersonderend Valley, approximately 40 km northeast of Caledon and forms part of a cultural historic route. The environment of Greyton is particularly sensitive to new developments and expansion that would invade or radically change the country setting. Boesmanskloof is located east of Greyton and although the settlement forms part of Genadendal, it has historically been segregated.

11.1.3 SETTLEMENT ANALYSIS

Analyses of (i) the biophysical and agricultural environments in and around Greyton, (ii) the socio-economic profile and (iii) the built environment within Greyton were undertaken to inform the spatial proposals that are presented in the following sections. Refer to **Annexure 1**, **subsection 6**. The analyses focused on the following aspects:

- **biophysical and agricultural environment:**
  - the environmental status quo and environmental risks;
  - agricultural status quo.
- **socio-economic:**
  - economic systems;
  - residential patterns;
  - income distribution;
  - demographics.
- **built environment:**
  - movement network;
  - social facilities distribution and access;
  - engineering infrastructure.

11.1.4 KEY SPATIAL CHALLENGES/ISSUES

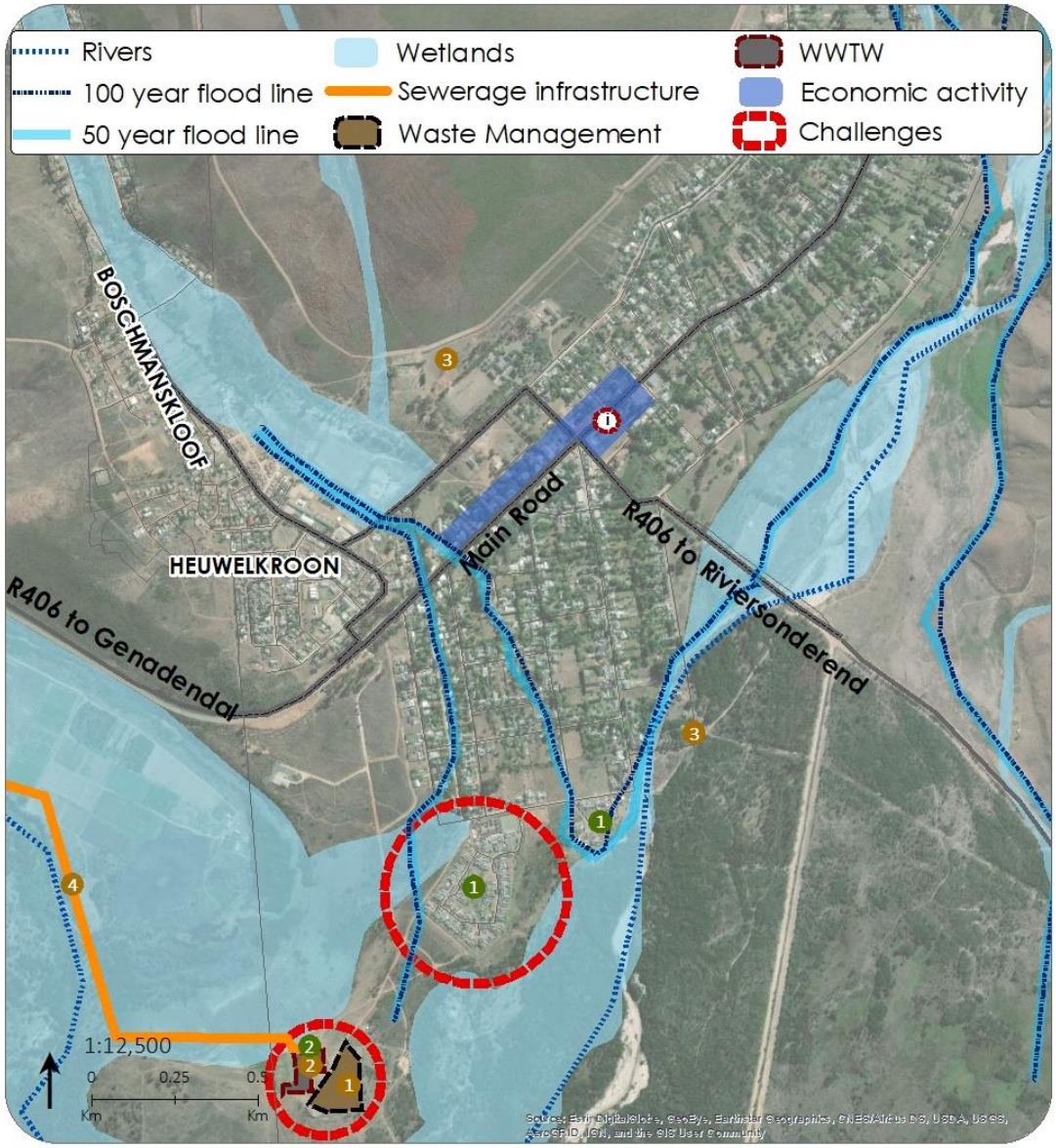
- Urban efficiency/Spatial dislocation:
  - Protecting the existing village structure, land use patterns and historic character, while addressing development needs.
  - Spatial integration between Boschmanskloof and Greyton is needed to limit duplication of public facilities.
  - Lack of off-street parking for businesses in Primary Economic Area.
- Socio-economic:
  - An extremely high historic population growth rate of 16% between 1996 and 2001, which declined to –8% during 2001 and 2007. It is considered unlikely that Greyton will sustain a negative population growth rate, however the significant decline in the population growth could be an indication of high land values and extremely limited opportunities for urban expansion and densification.
  - Facilitate a balance between conservation of the natural and man-made environment, the (historic) sense of place and the need to accommodate sustainable development and economic growth.
  - A growing demand for commercial and tourism development.
- Housing Backlog:
  - The subsidised housing backlog[1] is 306 persons (DoHS database, 2018).

[1] Housing backlog = number of informal structures, backyarders and farm workers on the waiting list.

11.1.5 DEVELOPMENT INFORMANTS AND CONSTRAINTS

- There are intact patches of relatively well connected Central Rûens Shale Renosterveld (having a 'critically endangered' ecosystem status) within the urban edge. These areas are listed as Critical Biodiversity Areas.
- The Gobos River, which bypass the eastern boundary of Greyton, is an important ecological corridor.
- The Bosjemanskloof River, which flows through Boschmanskloof, is an important ecological corridor.
- The Gobos River to the east and the Sonderend River to the south of Greyton are ecological corridors and are subject to flooding.
- Wetlands and/or floodplain areas associated with the abovementioned river systems are similarly an important part of these ecological corridors. Some of these areas are prone to flooding and presents a significant risk to residents.
- Steep, un-developable slopes are located to the north, east and northwest of Greyton.
- The Greyton Nature Park is located on the southern slopes of the Riviersonderend Mountains north of Greyton.
- Nature areas zoned as for conservation use is located in the area known as Knietjieshoogte, Maermanskloof and Loerkop.

The following figure illustrates the combined opportunities and constraints identified for Greyton. These need to be considered when planning for future development within the town.



OPPORTUNITIES & CONSTRAINTS

BIOPHYSICAL

- 1 Susceptable to natural disasters (flooding)
- 2 Existing sewerage works currently polluting major water courses threatening potable water supply to residents
- Biodiversity constraints on possible development areas
- Pristine surrounding natural/ rural environment

SOCIO-ECONOMIC

- Lack of diversity in economic sector
- Development pressure impacts negatively on rural/ heritage character of town
- Well-established econ. & toursim sector
- Affluent rates base
- Active and participatory community
- Heritage linked tourism

BUILT ENVIRONMENT

- 1 Landfill site closure and rehabilitation costs
- 2 Existing WWTW currently polluting major water courses
- 3 Limited land available for future expansion
- 4 Opportunity to link service infrastructure resisted by community representative body
- Limited opportunities for integration
- Accessibility
- Opportunity to link development opportunities with Farm 39

Figure 11.2: Greyton: Combined Opportunities and Constraints

11.2 PROPOSALS

11.2.1 THE SPATIAL DEVELOPMENT CONCEPT

(i) The Spatial Vision

Keep a sustainable Greyton, Country.

(ii) The Spatial Concept Plan (Figure 11.3)

The following main structuring elements informed the spatial vision and future growth potential of Greyton:

- **Nodes:**
  - The Primary Economic Area.
- **Paths/Routes**
  - The R406 Road;
  - Main Street;
  - Plantasie Street.
- **Edges**
  - The Gobos River;
  - The Sonderend River;
  - The Sonderend Mountains.
- **Districts**
  - Greyton Nature Park.

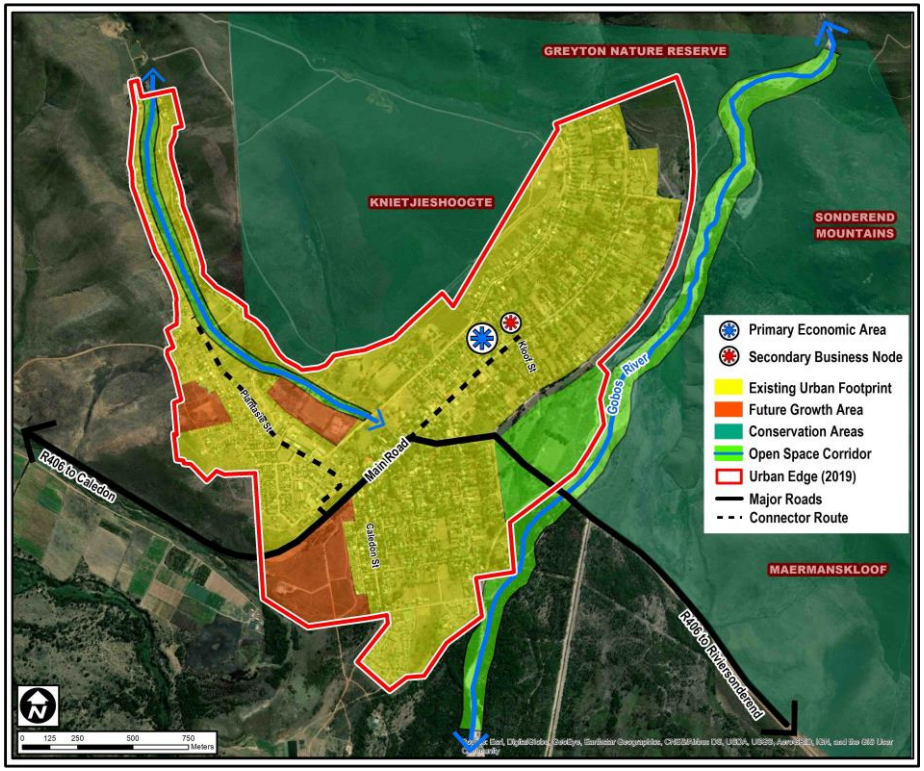


Figure 11.3: Greyton: Spatial Concept

(iii) Principles for Implementing the Spatial Concept

- **Encourage:**
  - conservation of the historic urban form and development pattern.
- **Promote:**
  - low density residential development in order to retain the village character of Greyton;
  - Greyton as a retirement, tourism, lifestyle village and a centre for

schools based educational excellence.

- **Restrict:**
  - industrial development (allow only business services);
  - subdivisions that are not consistent with the density policy.
- **Maintain / Protect**
  - the unique village / rural character of Greyton;
  - the historic urban conservation area;
  - the open space corridors created by the Gobos and other drainage cannels.
- **Contain:**
  - development within the urban edge.

(iv) Spatial Restructuring

- **Spatial and Social Integration**
  - As Boschmanskloof and Greyton is spatially isolated, facilitate integration through the identification of integration areas and integration spaces and along collector routes.
- **Densification:**
  - Where desirable and with due consideration of the density policy, general densification principles should be encouraged i.e. infill development, subdivision of erven, second dwellings etc. in accordance with densification guidelines.
- **New Growth Areas:**
  - Proposed urban growth in a southern and southwestern direction.

11.2.2 POPULATION GROWTH AND LAND USE REQUIREMENTS

Based on population projections and historic trends for Greyton, the population growth rate was 2.4% per annum between 2011 and 2018. Assuming an average population growth rate with a slight decrease of 2.2% per annum, it is estimated that ±13.0 ha of land is required to address the projected housing needs for the next 10 years (a total estimated population of 4 058 by 2028). However, considering the densification measures proposed in **Table 11.2** and areas for the required community facilities, ±9.5 ha of greenfield area is required. The table also sets out the projected need for urban growth up to 2028.

Table 11.2: Greyton: Projected Land Requirements

Proposed densification strategy		
Densification	**Assumption**	**Units**
Vacant erven	10% vacant erven developed	9
2nd Dwellings	5% of single residential erven developed	42
Sub-divisions	5% of single residential erven developed	42
Sub-total (Density of 25 du/ha):		**93 (±3.7 ha) (A)**
Residential projections and allocation assumptions:		

Density Category	**% of Population**	**Average Household Size**	**Density**
Low Density	20%	3	15 du/ha
Medium Density	30%	4	25 du/ha
High Density	50%	5	35 du/ha
Subsidy housing	-	5	65 du/ha

Projected residential units and required area up to 2028 (additional 787 people)				
Density Category	**Existing Housing Backlog**	**Population Increase**	**Units Required**	**Land Required (Ha)**
Low Density Housing	-	163	54	3.6
Medium Density Housing	-	244	61	2.4
High Density Housing	-	407	81	2.3
Current Subsidy Housing Demand	306		306	4.7
Units and area required for residential growth:			**502**	**13.0 (B)**
New residential growth area required (including densification): B-A=C:				**9.3 (C)**
Community facilities requirements for current need and future population growth up to 2028: 3 271 (2018) plus 787 additional people = 4 058 (2028) *				
Community Facilities	**Population Threshold**	**Space Requirement per Facility (ha)**		
ECDC/Crèche	2 400	0.02	-	-
Primary School	4 000	2.8	- **	-
Secondary School	5 000	4.8	- **	-
Skills Training Facility	as per need	0.2	1	0.2
Primary Health Clinic	5 000	0.2	-	-
Library	400	0.05	-	-
Community Centre	10 000	0.2	-	-
Parks (neighbourhood)	0.5 ha/1 000		-	-
Grass field	2.3		-	-
Fire Station	60 000	0.3	-	-
Police Station	60 000	0.1	-	-
Area required for facilities:				**0.2 (D)**
Total greenfield area required (C + D):				**9.5 ha**

* The CSIR Guidelines (2015) were used to determine the social facilities requirements. The estimated total population for 2028 was used to determine the total number of required social facilities. The existing social facilities were subtracted from the total number required to calculate the number of new facilities. The Social Infrastructure Accessibility Study for the Theewaterskloof Municipality (2018) was also studied.

** The Social Infrastructure Accessibility Study for the Theewaterskloof Municipality (2018) states that one primary and two secondary schools would be required for the population growth until 2028. However, the study also states that the findings of Greyton could be unreliable. Based on the CSIR guidelines, no additional schools would be required.

11.2.3 URBAN EDGE

In determining the urban edge for the Greyton urban area, consideration was given to the following:

- The urban edge approved in the TWKM SDF (2012);
- The existing cadastral subdivisions of Greyton, which provide clear edges have informed the demarcation of the urban edge.
- The historic character of Greyton is enhanced by the fact that only minor subdivision changes have been approved to the original old town plan established in 1854;

- Protecting the unmodified landscapes abutting the town, including the lower reaches of the Sonderend Mountains, the Greyton Nature Reserve, the Gobos and Sonderend River, etc.
- According to the population projections for Greyton, ±9.5 ha of greenfield area is required to accommodate the projected urban growth for the next ten years, which includes land for required community facilities.

On the basis of the above considerations, the proposed urban edge for Greyton was determined and is illustrated on **Plan 11.1**.

11.3 SECTOR STRATEGY: BIOPHYSICAL ENVIRONMENT AND AGRICULTURE

The biophysical sensitive environment within the urban edge should be managed and protected from inappropriate urban development in these areas only. In this regard, the following areas are of particular importance:

- The patches of Central Rûens Shale Renosterveld within the urban edge. Key objectives of managing these areas would include the maintenance of the connectivity between the patches and their incorporation into open space areas.
- The riverine environment of the Gobos River, as well as the wetlands and floodplain associated with the river, which functions as an ecological corridor and linear open space system.
- The riverine environment of the Bosjemanskloof River, as well as the wetlands and floodplain associated with the river, which functions as an ecological corridor and linear open space system.

Considering the natural environment surrounding Greyton, it is proposed to expand the Greyton Nature Reserve where feasible. This must be done formally through the appropriate statutory processes. A detail study be undertaken to determine the possible extent of such a nature reserve, what appropriate land uses can be accommodated within the reserve and to develop a sustainable management plan for the reserve.

Given the location of Greyton with regard to surrounding river and watercourse systems, the town is susceptible to flooding. A number of interventions were proposed to mitigate the impact on flooding in the 2012 SDF. However, these interventions were not implemented. As a result, they have been included as mitigating and preventative measures in this document.

This includes the following:

- Areas included within the 1:50 and 1:100 year flood line, should be incorporated into the open space system;
- No structural development are to be permitted within the 1:50 year flood line, without the consent of Council and the Department of Water Affairs;
- The following land uses are to be considered by the Local Authority above the 1:20 year flood line: sports fields, picnic sites, ablution facilities, fencing, landscaping, outdoor recreation;
- The water quality as a result of stormwater drainage pollution is to be monitored;
- Exotic species located within the flood zone areas are to be eradicated and constantly monitored;
- Existing natural drainage is to be retained. Where stormwater management facilities are required, they should be constructed with materials which will minimise the visual impact;
- Foundations of new structures should be constructed above the flood line;
- As far as possible, runoff from properties after development is to be the same as before development, using source control techniques;
- Further canalisation of stormwater should not be permitted downstream

of Greyton, or between the town and the Gobos River;

- A flood levee (slope or wall to regulate water levels) on the right floodplain of the Plattekloof River;
- Removal of the pedestrian bridge on the Plattekloof River;
- Removal of the culvert on the Plattekloof River located near the merging point with the Gobos River;
- Provision of spur dykes protected with riprap to streamline the water flow underneath the Gobos River bridge or the road should be protected against erosion;
- A levee protected with riprap should be constructed at the southern end of the Gobos River to protect a recently build residential dwelling;
- Consideration should be given to the construction of a flood attenuation dam linking with a canal (lined with riprap consisting of river boulders) along the road where the river currently flows.

11.4 SECTOR STRATEGY: SOCIO-ECONOMIC

11.4.1 Industrial Development (service trade)

Small scale locally based service trade activities should be allowed in Greyton. These activities are to be located outside the Primary Economic Area and the historical core of Greyton to ensure minimum impact on the landscape and streetscape character of the town. Area 8 (**Plan 11.1**), proposed as a Secondary Business Node and bounded by Medusa, Pointer and San Lucia streets, is proposed to permit service trades.

11.4.2 Tourism

Tourism is the main economic sector in Greyton. Considering development in recent years, it appears as if the sector is responding positively to the spatial policy proposals of the 2012 SDF. To this effect, any new development that is proposed for Greyton must be sensitive towards the existing character of the town and must be compatible with the tourism based economy of the town. The intersection of Main Road and High Street forms the main tourism node for the town. A secondary tourism node is proposed at the intersection of Main Road and Caledon Street (Refer to **Plan 11.1**).

Tourist activities that capitalise on the surrounding natural environment such as the development of further hiking trails, mountain bike trails, horse trails, etc. must be encouraged. The existing Loerkop caravan park should also be promoted as a tourist destination.

11.4.3 Economic Development

Through the years, the town has responded positively to the policy proposals for the Primary Economic Area of Greyton in the 2012 SDF. It is therefore recommended that the approach of the 2012 SDF with regard to the development of the Primary Economic Area of Greyton be maintained. This area should therefore be divided into an area consisting of primary retail and commercial activities and an area of secondary commercial land uses. A third area consisting of secondary businesses and commercial land uses is located in Heuwelkroon (Area 8 on **Plan 11.1**).

A distinction is made between a Primary Economic Area and a Secondary Economic Area. The Primary Economic Area can accommodate higher intensity mixed use business and commercial related land uses, i.e. offices, tourism accommodation, residential land uses, community facilities and restaurants. Light industries and services stations must not be permitted within this area.

The Secondary Economic Area can accommodate lower intensity mixed use development, including land uses such as residential, tourism, community facilities and restaurants.

The Secondary Business Node (Area 8 on **Plan 11.1**) can accommodate additional commercial and business service activities.

A major spatial implication for Greyton is the provision of parking and general traffic flow. An investigation must be conducted into the overall movement system of Greyton to provide much needed recommendations with regard to direction of traffic flow, the development of NMT, the provision of satellite parking areas and heavy vehicle movement through the primary economic node.

11.5 SECTOR STRATEGY: BUILT ENVIRONMENT

11.5.1 Population Growth and Land Use Requirements

Based on the population projections for Greyton, the estimated population would be 4 058 by 2028. According to the Community Survey of 2016, the average household size for Greyton is 2.6 persons. It is therefore estimated that approximately 1 561 households will reside in the town by 2028. In order to accommodate the above population growth, an estimate 9.5 ha of greenfield area will be required, which include land for required community facilities.

11.5.2 Residential

A range of housing options are to be provided to address the needs of different income groups, age groups and personal choice.

Affordable housing is to be provided for residents that qualify for government housing subsidies. GAP housing is proposed south of the R406 Road around the Eskom substation (Area 2 on **Plan 11.1**). This has been identified as a priority housing project by TWKM and proposed as a Priority Development Area. Additional medium density subsidised housing is proposed north of Greyton Primary School and around the sportsfield (Area 1 on **Plan 11.1**). In total, 19.0 ha is provided for medium to high density residential land uses.

11.5.3 Cemeteries

Cemetery expansion is proposed to the east of the existing cemetery (Area 9 on **Plan 11.1**) to accommodate the demand for the immediate future.

11.5.4 Social Facilities

The projected population growth in **Table 11.2** and the CSIR Guidelines for the Provision of Social Facilities (2015) were used to determine the required social facilities by 2028. Cognisance was also taken of the current and future need identified in the Social Infrastructure Accessibility Study for the Theewaterskloof Municipality (2018). As illustrated in **Table 11.2**, assuming the estimated population growth to 2028, an additional skills training facility will be required. The Social Infrastructure Accessibility Study for the Theewaterskloof Municipality (2018) states that one primary and two secondary schools would be required for the population growth until 2028. However, the study also states that the findings of Greyton could be unreliable. Based on the CSIR guidelines, no additional schools would be required.

11.5.5 Densification and development of vacant land

The densification strategy that was developed as part of the 2012 SDF is regarded as appropriate for the town. This strategy was also implemented successfully over the last couple of years and it is therefore proposed that the same approach be adopted for the purposes of this SDF.

Greyton is characterised by a low density residential pattern; ±60% of all residential erven are larger than 1 000 m². The low density level contributes towards the unique quality of the streetscapes and historic village character. Densification should therefore only be encouraged with due regard to the potential impact on the cultural and heritage resources of the town. Densification could include:

- second dwellings units;
- subdivisions.

The following densification guidelines for Greyton are recommended. Refer to **Figure 11.4** for the location of these planning areas.

Table 11.3: Greyton: Densification Guidelines

PLAN AREA	REGION	DENSITY ZONE	DENSITY CATEGORY	PROPOSED DENSIFICAITON MEASURE
A1	Heuwelkroon	1, 2	High	Second dwelling units; subdivisions
B1	CBD	3, 4, 5, 6	Medium	Second dwelling units; Subdivisions
C1	Oak Street	4, 5, 6	Medium	Second dwelling units; subdivisions
D1	Regent Street	5, 6	Low	Second dwelling units; Subdivisions
E1	Boschmans kloof	2, 3	Medium-High	Second dwelling units; Subdivisions
F1	West of Buitekant Street and South of van Schalkwyk Street	3, 4	Medium	Second dwelling units; subdivisions

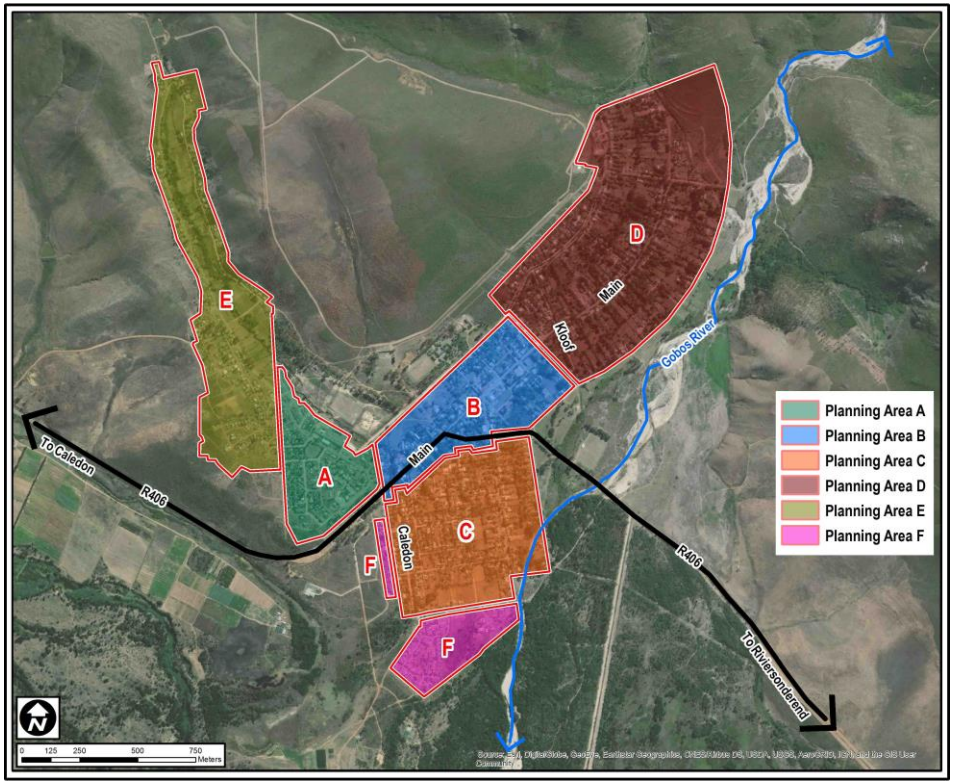


Figure 11.4: Greyton: Densification Planning Areas

11.5.6 Heritage

Although much emphasis is given to the historical character of Greyton, only a few structures have been declared Heritage Resources i.e. the Old Post House and 14 Main Road (Erf 168). The historical importance of the following features has also been documented:

- Hebert Vigne House (1854);
- Moravian Church;

- Ox Wagon route;
- Anglican Church;
- Original Moravian school.

The entire area according to the original 1854 layout plan is included in one large proposed urban conservation area, as shown on **Figure 11.5** as Area C. There are many interesting and important buildings in Greyton, representing a number of styles that were popular around the turn of the century. New buildings were mostly built in a sympathetic style, and thus complement the urban conservation precinct.

The small Moravian Mission Church was originally a Dutch Reformed Church. The St. Andrews Anglican Church, together with the community constitutes an attractive streetscape.

There are numerous buildings in Greyton which have retained their authenticity and are worthy of inclusion in a Heritage Register.

Boschmanskloof was initially established as an extension of the Genadendal Mission. Two precincts with heritage value were identified:

- Precinct A: Clusters of old Cape Vernacular cottages (some well-maintained, some in ruins, some substantially altered) were observed in Rose and Protea Streets. They form a coherent streetscape together with the original garden lots (the central open space around the river).
- Precinct B: As above, clusters of Cape Vernacular cottages were observed in Aster Street, some well-maintained, some in a state of disrepair and some in ruins. The clusters of well-maintained cottages make this a conservation-worthy streetscape.

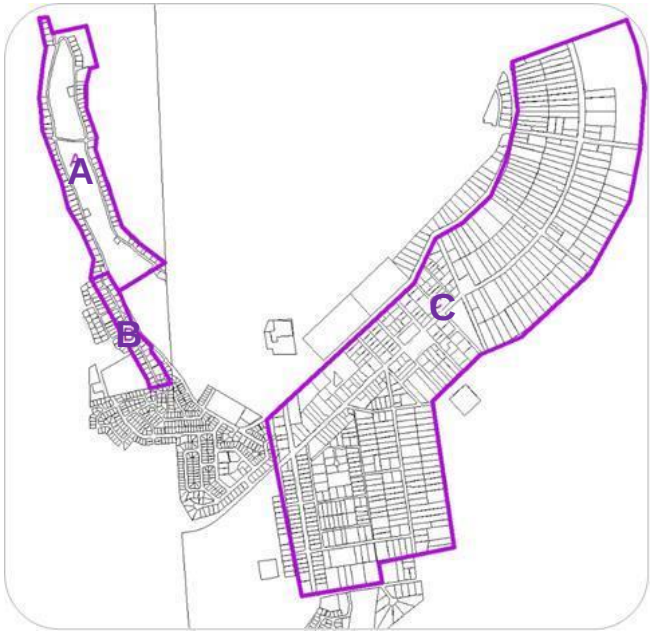


Figure 11.5: Greyton: Heritage Precincts

11.6 SECTOR STRATEGY: INTEGRATION

11.6.1 Spatial Context

The inter-linked nature of civil services between Greyton, Heuwelkroon and Boschmanskloof contributes towards the goal of spatial integration between communities. In addition, inequalities between Boschmanskloof, Heuwelkroon and Greyton with regard to the accessibility of quality urban spaces, requires that integration mechanisms be implemented. Priority should be given to linking Boschmanskloof and Heuwelkroon with areas of mixed use activities and economic opportunities. Furthermore, consideration should be given to improving the overall quality of open spaces and recreational facilities located in especially Boschmanskloof and Heuwelkroon (Area 6 on **Plan 11.1**).

11.6.2 Spatial and Social Integration Proposals

- Integration Areas

  Support the activity street along Main Road to improve accessibility to businesses and community facilities located in the Primary and Secondary Economic Areas. To further facilitate and improve ease of access, a system of pedestrian routes is proposed along Main Road, Plantation Street and Park Street.

- Integration Spaces

  The Municipality should improve the overall quality of open spaces, recreation areas and community facilities, as well as rationalise the usage thereof between different social and income groups. Proposed integration spaces include:

  - The sport facilities in Heuwelkroon (Area 6 on **Plan 11.1**);
  - The village market square (corner of Main Road and Cross Market Street);
  - The Secondary Business Node (Area 8 on **Plan 11.1**).

11.7 PRIORITY DEVELOPMENT AREAS AND SPECIAL STRATEGIC INTERVENTIONS AND SPATIAL PROJECTS

The two proposed GAP housing projects (Areas 1 and 2 on **Plan 11.1**) have been identified as Priority Development Areas, which need to be prioritised for planning and implementation purposes. Priority Development Areas will either address a specific urgent need, e.g. subsidised housing, or to facilitate economic activity and job creation, e.g. high income housing, tourism development, economic development, etc.

The following strategic interventions have also been identified, which require more detailed studies and precinct planning:

- expansion of the Greyton Nature Reserve (refer to **subsection 11.3**);
- Primary Economic Area traffic and parking investigation (refer to **subsection 11.4.3**).