SECTION A
TOWARDS AN APPROPRIATE DENSIFICATION STRATEGY FOR THE OVERSTRAND MUNICIPALITY

1. BACKGROUND

The continual outward spread of low density development on the edges of Overstrand towns is leading to significant and rapid increases in the urban footprint of the towns. This Urban Sprawl (the outward expansion of the urban footprint of existing towns) is threatening the long-term sustainability of the Overstrand Environment and its sub-region. The specific concerns are:

- Agricultural land and natural undeveloped areas on the edge of Overstrand towns are increasingly being consumed by urban development. These areas, which often include areas forming the natural resource base of Overstrand tourism, are being eroded.
- Low density urban sprawl results in long travel distances. The result is a reliance on private road based transport resulting in rapidly increasing traffic congestion and CO^2 emissions.
- Fragmented and dispersed development patterns destroy the place making qualities and opportunities for urban vibrancy in the Overstrand towns and neighbourhoods.
- Low density development (in the form of large single residential erven) increases the cost of infrastructure provision and maintenance. The current low density form of development dissipates the positive economic effect of agglomeration and economies of scale, limiting access to opportunities, causing operational inefficiencies and a wastage of supporting economic resources and infrastructure.
- Greenfield land suitable for urban development is a limited resource – there will be an increasing shortage of suitable greenfields land to accommodate both the existing subsidy and affordable housing backlogs, as well as the future projected needs of the area, if the current low density development patterns are allowed to continue.

The potential of using densification as an integral part of a growth management strategy to positively redress and counteract the effects of urban sprawl is now recognised, by the Overstrand Municipal Council, as a necessary and positive step to promote the longer term sustainability of the Overstrand Municipality and its sub-regions' environmental quality.

In this regard, the Overstrand Municipal Council decided to proceed with a growth management strategy. The objective of this strategy being to:

- Integrate, update and rationalise service provision, infrastructure planning and budgeting, as well as implementation, as part of a sustainable cohesive growth management strategy for the Overstrand Municipal IDP (Integrated Development Plan).
- Guide the Overstrand Municipalities Planning Committee's decision making processes.
- Inform the Spatial Development Framework (SDF) with an integrated densification policy that is area specific and sensitive to the character, heritage and environmental conditions unique to the Overstrand.
- Provide an integrated policy framework that will guide the detailed planning and design of market driven development initiatives and inform the compilation of more detailed precinct plans, for specific areas or identified opportunities.
- Align density patterns, trends and proposals with the land use management/zoning regulations and infrastructural capacity and future provision.
- Identifying pragmatic mechanisms and processes (area-wide to local level) to facilitate and support the appropriate planned implementation and management of higher densities.

It should be noted that the intention of this growth management policy is not to grant or restrict existing zoning rights. It will however provide clear guidelines to be used by the Overstrand officials and political decision-makers in executing their land-use management functions.

This document defines and explains densification as a growth management tool. It then sets out the importance of the densification process as a key component of the growth management strategy and proceeds to identify and discuss the local area-specific factors that affect densification. Following this, the preferred strategy and associated policies are outlined and potential local area densification interventions are identified based on a multi-disciplinary analysis to determine the maximum overall appropriate limit to urban densification.

At a broad level, this strategy will provide an overall average maximum gross density for the Overstrand area based on a local area specific assessment of the propensity of the various areas to densify. The overall maximum appropriate limit to development being based on a detailed integrated assessment and synthesis of the various factors, which together affect the propensity for densification within specific existing urban areas, infill sites and future urban extension areas. The objective ultimately being to achieve a balanced level and form of densification within the Overstrand without negatively impacting on the natural and built character of various areas, in co-ordination with available and planned infrastructural capacities.

2. POLICY CONTEXT

The current national and provincial policy context, within which the concept of "urban densification" is strongly advocated, lies in a number of strategy and policy documents prepared by different spheres of government. This policy framework, which is broadly summarised below, jointly and actively promotes densification within urban settlements throughout South Africa.

The **Constitution of the Republic of South Africa, 1996 (Act 108 of 1996)** supports densification to develop the built environment, for the efficient provision of services, social and economic development and environmental sustainability.

The principles of **the Development Facilitation Act, 1995 (Act 67 of 1995) (DFA)** which are applicable to Cape Town and the Western Cape emphasise the value of higher densities in urban settlements. Integrated higher density development is motivated for:

- small-scale businesses dependent on vibrant markets'
- supporting a range of social services and facilities,
- cheaper infrastructure provision per building unit of bulk services such as water, sewerage and electricity,
- integrated movement modes and public transport, and
- integrated land uses ranging from mixed uses to the increase in spatial proximity of different uses to each other.

The **Provincial Spatial Development Framework (PSDF)**, prepared by the Provincial Government of the Western Cape (PGWC) in 2005, and approved as a Section 4(6) Structure Plan in terms of the Land Use Planning Ordinance, 1985 (Ord 15 of 1985), in June 2008, supports the introduction of an urban edge and the need to increase densities. An average or gross base density of 25 dwelling units per hectare is proposed. **It is important to note that Policy UR2 of the PSDF makes the short-medium term achievement of the densification target mandatory.**

At the local level the Overstrand Municipal SDF and existing statutory approval structure plans all recognise and promote the principle of densification.

3. METHODOLOGY

In finalising the "terms of reference" to the consultants, it became clear that the municipal requirements and need was not for a "densification study" per say, but rather for a "Growth Management Strategy" where urban densification would play a central role together with other critical factors affecting its effective implementation namely the provision of infrastructure, services and community facilities. It was realised that its effective implementation would require a robust, yet flexible management system that ensures that the implementation of urban densification was linked and carefully co-ordinated with the market cycles of urban growth, the annual municipal budgeting / capital spending programmes, as well as the implementation of infrastructure, community facilities and services provision.

On this basis, it was agreed that the product forthcoming from this process, would include a Growth Management Strategy with all plan sets produced in a GIS format that would allow the data base and interventions / proposals to be revised and updated, on an ongoing basis. This being undertaken in co-ordination with the annual budgeting and strategic planning exercises of the municipality. The effective implementation of this Growth Management System would therefore have to be regularly assessed to determine its appropriateness, its effectiveness as a method, its feasibility in operation, and the acceptability of results obtained from it.

The methodology followed to compile the study consisted of five phases, as agreed to with the Overstrand Municipality and the technical/steering committee which was convened to manage the process.

3.1 PHASE 1: PROJECT INITIATION

The project was placed on public tender and awarded to:

Urban Dynamics Town and Regional Planners: Western Cape	URBAN DYNAMICS
ACG Architects and Urban Design	acg architects

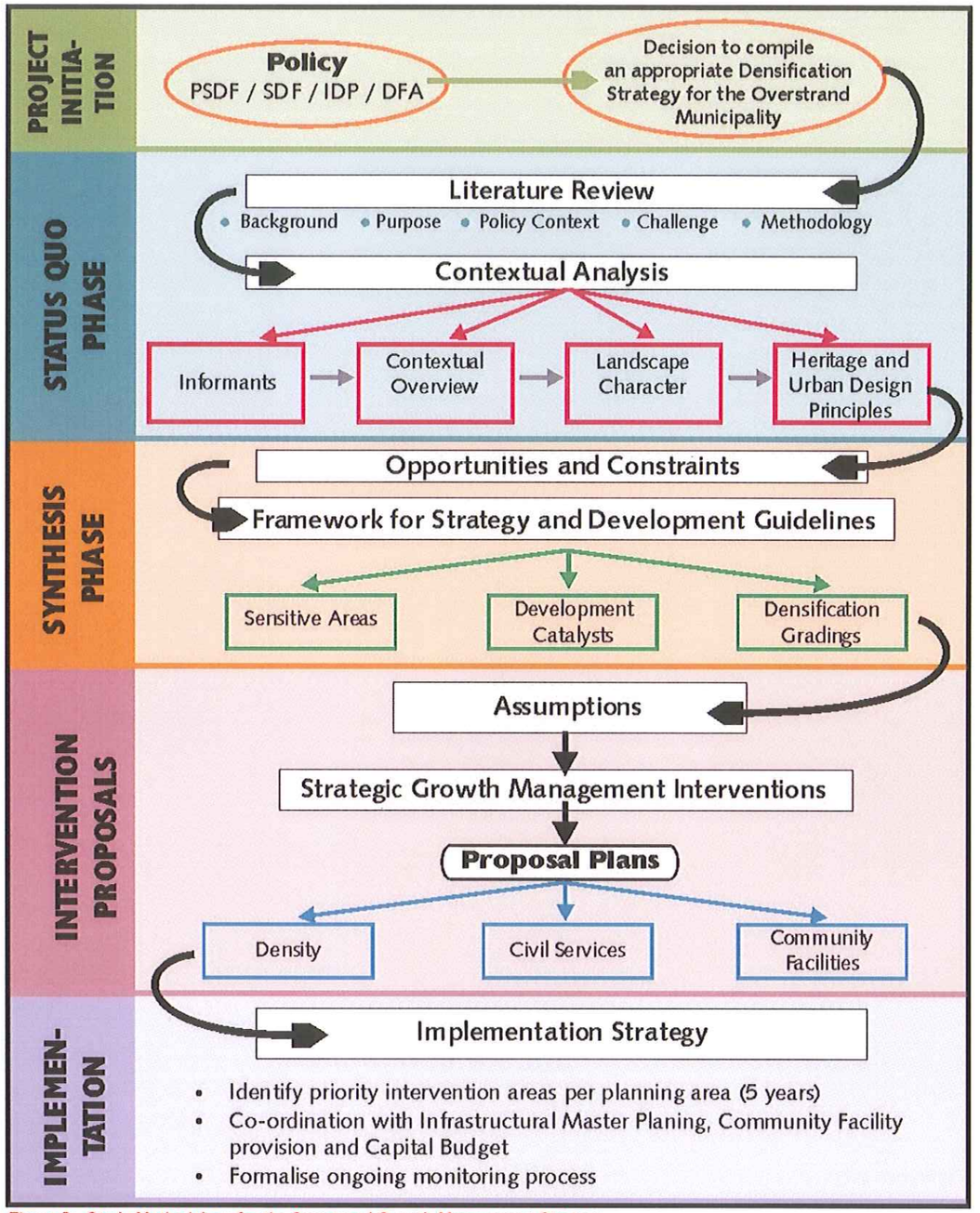


Figure 1: Study Methodology for the Overstrand Growth Management Strategy

Nicolas Baumann Heritage	NICOLAS BAUMANN URBAN CONSERVATION & PLANNING

Following the allocation of the tender, the project team, public consultation process, study methodology and end product was agreed to with the officials of the Overstrand Municipality.

The project steering committee convened for this study consisted of the following stakeholders, which met on a regular basis:

- the relevant Overstrand Council officials and Councillors,
- Provincial Government of the Western Cape, and
- the Eskom appointed allocated consulting TEAM.

In terms of the public consultation process, to be followed, the general public were informed, at the very outset of the project, at a well advertised public meeting held in Hermanus. It was then agreed that the outcome of the study would be communicated to the public by making the draft documentation available for public comment and through a series of advertised "open day" public meetings to be held in Kleinmond, Hermanus and Gansbaai, respectively.

3.2 PHASE II: STATUS QUO ASSESSMENT

The Status Quo phase of the project included primarily the technical collation, verification and analysis of baseline information as well as a literature review. This Phase served to document the baseline data, informants and the contextual information required to compile an appropriate densification policy.

The baseline informants used for this study broadly consisted of the following:

- Locality,
- Current urban structure and form,
- Morphological development historical township establishment pattern,

- Land ownership patterns,
- Land use surveys,
- Current residential densities / patterns,
- Zoning,
- Community facility provision,
- Civil services provision.

Based on the abovementioned baseline information a contextual Urban Design and Heritage Overview was compiled which informed the compilation of a Density and Area Character analysis for each of the towns within the Overstrand Municipality.

3.3 PHASE III: DATA SYNTHESIS

The Data Synthesis Phase can be described as the phase in which all information collated was combined and collectively analysed as a coherent whole. The objective being to identify area specific information considered relevant to the future urban growth management of an area / town.

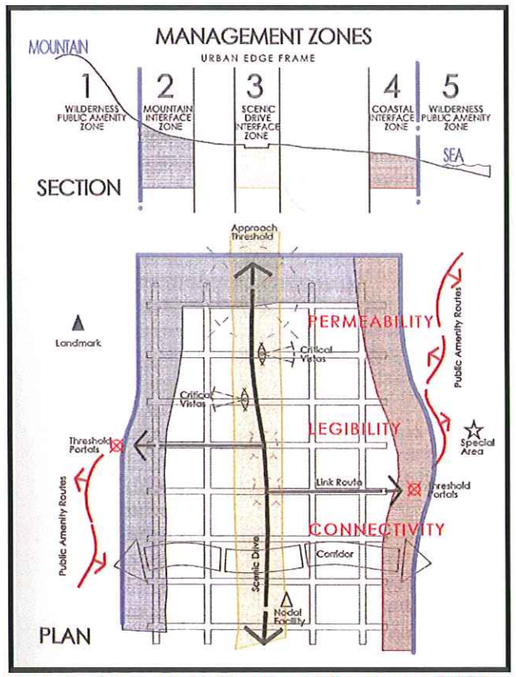


Figure 2: Framework for Strategy and Development Guidelines

As part of the synthesis phase a notated **"Opportunities and Constraints"** map was compiled for all of the urban areas within the Overstrand Municipality. The methodology used to compile the "opportunities and constraints" plans was largely based on the application of a conceptual structuring diagram, specific to the Overstrand. This conceptual structuring diagram illustrates the guiding principles which have been utilised, by the consultant team, in applying urban design and heritage conservation principles within the particular spatial and qualitative landscape context of the Overstand. This framework is generic for all the coastal towns in the Overstrand Municipality and highlights specific features in terms of sensitive areas, development catalysts and densification grading from which desirable forms of development can be identified.

The synthesis of all the data collated is summarised in the "Opportunities and Constraints" plan sets for each of the urban areas. This synthesis then forms the foundation on which the strategic interventions and proposals are based.

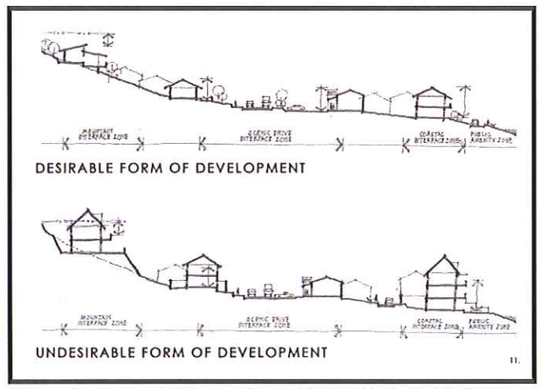


Figure 3: Figures indicating Desirable and Undesirable Forms of development

3.4 PHASE IV: DENSIFICATION INTERVENTION AND PROPOSAL

Following the data synthesis phase of the project, the forthcoming "Opportunities and Constraints" data sets and plans were then used as the basis on which the densification proposals and growth management proposals were formulated for each urban area.

It should be clearly noted that the objective of this phase of the study was to formulate a set of integrated area appropriate densification interventions for each Planning Unit based on the theoretical assumption that all the required infrastructure and community services were installed and available. **This methodology allowed the professional team to determine the theoretical maximum appropriate limit to urban development within the defined urban edge.**

It should be clearly noted that the densification proposals and growth management interventions are based on the professional teams' collective assessment of the foregoing qualitative and quantitative analysis of the Overstrand's urban environs.

The proposals collectively illustrate the theoretical maximum threshold for urban development in a specific area. The densification projection should nevertheless always be viewed as an indication of the urban areas maximum theoretical propensity to densify / develop based on available current information, technology and climatic conditions, etc. The intention being that the Overstrand's Growth management Strategy will remain dynamic in the sense that as the variables, norms and assumptions used to formulate the proposals and interventions change, so will the densification proposal and the growth management strategies.

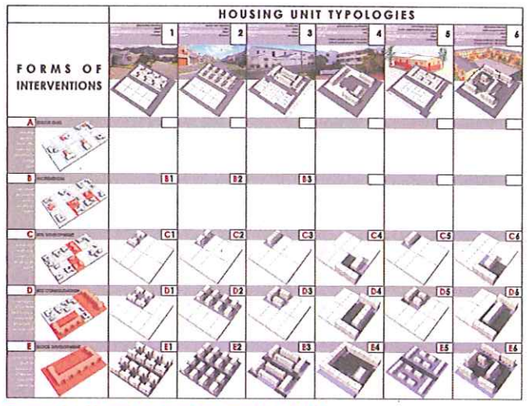


Figure 4: Housing typology matrix table

The methodology used per planning unit, sets out specific Housing Unit typologies proposals per area, illustrated on a housing typology matrix table, compiled specifically for the Overstrand Municipal area. The objective of this matrix is to illustrate the density range / units per hectare for all the residential development typologies, as well as the development types and their built form. Based on the various proposed densification interventions, the potential theoretical maximum number of dwelling units and housing type deemed appropriate for that specific Planning Unit has been identified.

The advantage of following this methodology being that the growth management proposals, for a certain area or location, are very specific, as to what density and in what form, densification will take place on a specific site or in a specific area.

The identifying of a theoretical maximum to development, on an area specific basis, provides significant advantages for the planning and budgeting of future infrastructure or for the upgrading of existing infrastructure. This allows the master planning and budgeting exercises for infrastructural services and community services to be based on more specific information which will ultimately improve the efficiency of service provision.

The densification proposal / intervention plans includes a table indicating the number of existing relevant community facilities, relative to the number required in terms of the Western Cape Provincial Government's current provision standards. Where necessary, proposals are made on the provision of community facilities per Planning Unit, based on the theoretical shortfall.

3.5 PHASE V: IMPLEMENTATION STRATEGY

As already explained, the methodology followed, was based on determining the maximum appropriate theoretical quantitative limit to densification, within each specific defined Planning Unit area, which collectively make up the study area. In following this methodology, the explicit intention was to determine, based on a qualitative and quantitative assessment of each Planning Unit within its urban context, the most appropriate densification proposals / interventions for a specific area, within each spatially defined Planning Unit.

This maximum appropriate limit to development is however theoretical, based on the assumption that infrastructure capacity is available. The reality being that urban development / densification can only proceed if the bulk resource capacity and infrastructure, as well as community services are available. The implication being that urban development and densification can only be sustainably achieved, if the infrastructure and community facilities required are systematically planned, budgeted and implemented on the basis of identified priorities as and when the growth takes place.

In this phase, area specific densification proposals / interventions, for the next five years, were prioritised, in co-ordination with infrastructural master planning, community facilities availability, and the municipalities' capital budgeting programme.

Priority areas for the next five years were identified. Thus enabling the municipality to effectively link its master planning, the provision of community facilities and the capital budget to these priorities. The study also recognises that to ensure the effective implementation of this growth management strategy the specific implementation proposals will have to be:

- included into the Zoning Scheme as Overlay zones, and
- adopted as Local Area plans / Development Frameworks and be approved in terms of Section 4(6) of the Land Use Planning Ordinance, 1985 (Ord 15 of 1986).

SECTION B
UNDERSTANDING Ddensification

4. WHAT IS DENSIFICATION?

4.1 DEFINITION

For the purpose of this report, densification is defined as follows:

Densification is the process whereby residential densities (the number of dwellings per hectare) are increased, in a planned and meaningful way, within the existing boundaries of a specific area. That is the increased use of space to provide more residential dwelling units, both horizontally and vertically, within existing urban areas, within existing properties and in new developments. This increased use of space being accompanied by an increased number of residential units and thus population over a specifically defined or measured area.

Densification is therefore not an end in itself but rather a means of improving the efficiency and sustainability of public infrastructure and thereby improving the social and economic vitality of urban precincts.

It is unanimously accepted that one of the most effective means of managing growth and its social and economic performance, is to achieve the highest appropriate densities for a specific locality/ area within an urban system. Increases in density[1], if applied appropriately, will also have many positive economic implications as an increase in population density essentially creates economic thresholds which will support a diversity of businesses and facilities. The variety of choices and opportunities offered by a built environment are therefore often a direct function of residential density.

This support and promotion of higher densities needs to be qualified, and has often been misunderstood. It is easy to confuse density or densification with overcrowding and to assume the position that density promotes social pathologies. The reality is, overcrowding promotes social pathology. Density promotes activity and economic vitality. Certain examples of high density developments and the environments that they have created have resulted in negative perceptions of such development. This has led people to question the desirability of higher densities and their compatibility with single dwelling residential use. The facts are that many of these perceptions are based on the poor design and quality of the buildings and the degraded context of their surrounding environments, as opposed to densification per se."

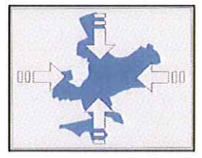
4.2 THE MOTIVATION FOR URBAN DENSIFICATION

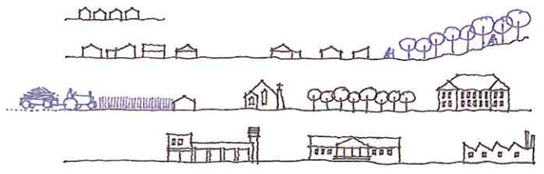
The benefit of an appropriate increase in residential densities holds many advantages for the towns of the Overstrand. The following universally valid statements extracted from Back to the Future: Redesigning Our Landscape with Form, Place and Density (Vancouver: Urban Development Institute, Pacific Region, 1993) have special relevance to the towns within the Overstrand Municipality:

- there is no best overall aggregate density,
- there is a connection between density and infrastructure,
- low density is expensive and inefficient,
- density is economic only at certain levels,
- low density development consumes land quickly, but mixed use, medium density takes some of the pressure off the rural land resource,
- increased density promotes increased developer capitalization,
- increased density facilitates variety in housing form,
- higher densities and effective redevelopment can reduce public costs,
- good urban design is essential,
- increased density facilitates affordable housing and conserves land,
- "multi-family housing" must strive to embody appropriate single-family qualities,
- existing ideas about open space must be re-examined.

Densification, carefully and prudently applied to existing and new development, can contribute positively to the creation of good quality, efficient and sustainable urban environments in a number of different ways.

4.2.1 DENSIFICATION HELPS PREVENT URBAN SPRAWL AND REDUCES THE CONSUMPTION OF VALUABLE / NON RENEWABLE RESOURCES



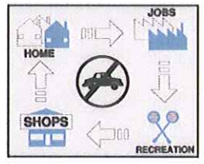


PROTECT VALUABLE AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

By encouraging development upwards rather than outwards, densification helps reduce the consumption of valuable resources such as agricultural land, areas of mineral potential, aquifer recharge areas and valuable biodiversity areas. It can also reduce the consumption of non-renewable fuels by lessening car dependency.

PREVENTION OF URBAN SPRAWL AND THE PROMOTION OF THE DENSIFICATION AND INTEGRATION OF THE EXISTING URBAN FABRIC

4.2.2 DENSIFICATION SUPPORTS THE DEVELOPMENT OF A VIABLE PUBLIC TRANSPORT SYSTEM BY PROMOTING THE INTEGRATION AND INTENSIFICATION OF LAND USES



Low density urban sprawl results in extended travel distances. The result is a reliance on private road based transport which contributes to increased traffic congestion and carbon emissions. In contrast, higher densities, accompanied by increased population thresholds and mixed use development, support pedestrian movement, cycling, and the efficient functioning and viable provision of public transport services along the major routes.

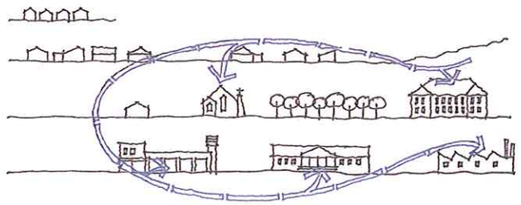
ADDRESS THE SPATIAL INADEQUACIES OF PAST PLANNING WHICH RESULTED IN THE SEGREGATION OF LAND-USES AND HENCE THE RELIANCE ON THE MOTOR CAR

Higher densities in appropriate locations, especially those close to urban opportunities (services, facilities and jobs) and public transport help rationalise the housing pattern and improve access to amenities and facilities. They help reduce travel distances and times and the costs associated therewith.

4.2.3 DENSIFICATION FACILITATES ECONOMIC OPPORTUNITIES AND ACCESS TO FACILITIES WITHIN THE URBAN SYSTEM

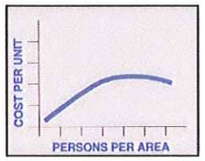
Higher densities, accompanied by increased population thresholds, create sufficient consumer agglomeration to generate the development of economic opportunities in close proximity to social facilities and services.

[1] In the context of this report, the term Density refers to Gross Residential Density, that is: "The number of dwellings per hectare within the boundaries of a specific area (including areas occupied by other non-residential land-uses, roads, etc.)"



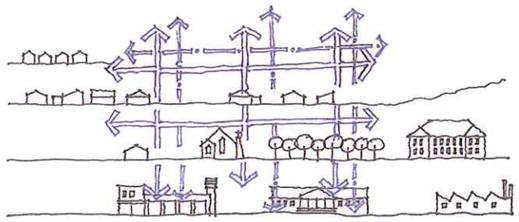
IMPROVE ACCESS TO OPPORTUNITIES AND FACILITIES IN THE URBAN SYSTEM

4.2.4 DENSIFICATION SUPPORTS EFFICIENT SERVICE PROVISION



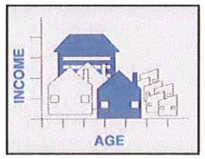
INCREASE IN ECONOMIC EFFICIENCY BY INCREASING THRESHOLD POPULATIONS AND DECREASING THE RANGE IN WHICH THEY ARE ACCOMMODATED

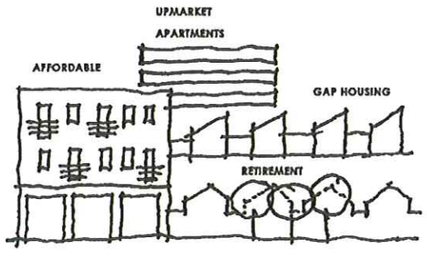
It enables the cost-effective provision and optimal use of infrastructure. This is particularly the case where there is excess service capacity or where increased thresholds (i.e. higher population densities) are required to cost effectively provide services and infrastructure.



MINIMISE COST RELATED INEFFICIENCIES IN TERMS OF INFRASTRUCTURAL PROVISION WITHIN THE OVERSTRAND MUNICIPAL AREAS: ACHIEVE ECONOMY OF SCALE

4.2.5 DENSIFICATION IMPROVES THE VARIETY IN HOUSING MIX AND CHOICE OF HOUSING TYPE





PROVISION OF HOUSING FOR A RANGE OF INCOME AND AGE GROUPS IN AN EFFICIENT, SUSTAINABLE AND EQUITABLE MANNER

Densification promotes a mix of residential densities, ensures a choice of housing types and tenure options for a range of income and age groups.

4.2.6 DENSIFICATION CONTRIBUTES TO URBAN PLACE MAKING AND IMPROVES SAFETY

Appropriately designed and located higher densities (in terms of form, scale, height and orientation) can provide an opportunity for attractive place making and safe urban environments, particularly those in proximity to public spaces (both natural and built).

Higher densities are, in themselves, not a guarantee of quality urban environments, appropriate built form or good urban design. Appropriate regulations, local development policies and urban design frameworks must be used to effectively ensure the quality of the built environment.

4.3 MISCONCEPTIONS ABOUT URBAN Ddensification

The following statements are representative of some of the prevailing perceptions regarding the acceptability of higher densities. There perceptions and a response to these perceptions are set out below:

4.3.1 SINGLE DWELLING RESIDENTIAL USE IS NOT COMPATIBLE WITH HIGH DENSITY RESIDENTIAL DEVELOPMENT

There are many situations where low-rise, high density development will be compatible with single dwelling residential development. It is generally a case of good overall design and keeping development to a compatible scale and height.

4.3.2 DENSIFICATION IMPLIES THAT 'ONE SIZE SUITS ALL'

Not everyone wants to live in suburbia, or alternatively, in high-rise flats. The intention should be to ensure that a range of opportunities, life styles and choices exist for people in all areas of the Overstrand and all income groups, but within compatible forms of higher density development and without impacting negatively on the urban environment.

4.3.3 DENSIFICATION IMPLIES HIGH-RISE BUILDINGS

High density does not necessarily imply high-rise development. Acceptable levels of densification can be achieved through well-designed, low-rise development and by the creation of smaller erven (ground-floor development). The height of developments should be appropriate to the scale and context of the surrounding urban environment.

Higher densities can be achieved through three to five storey buildings such as the low-rise flats. Although, high-rise flats are acceptable, in specific suitable locations isolated high-rise buildings are not to be encouraged as this is detrimental to the area character and density. High-rise flats can exacerbate social problems in poorer areas, especially if the buildings are of a poor design and quality, and where there is no proper relationship with surrounding open spaces and facilities.

Low-rise densification can also be effectively achieved in existing residential areas through second dwellings, group housing (town-house) schemes, subdivisions, and erf consolidations with appropriate redevelopment resulting in higher densities.

4.3.4 DENSIFICATION IS THE CAUSE OF POOR QUALITY LIVING ENVIRONMENTS OR OVERCROWDING

There is no evidence to support a direct causal relationship between high density living and negative sociological impact. The social problems associated with the high density housing estates on the Cape Flats are not as a result of high density, but rather, are a result of economic circumstances, poor unit and building design, poor building maintenance and the under-provision and poor management of public spaces and facilities.

There is a concern that higher densities are perceived as being unattractive high-rise buildings surrounded by poorly articulated spaces. It is, however, evident that higher densities can be accommodated in a variety of built forms. This can result in differing urban qualities, which are largely a function of form, scale and height rather than the extent of densification or higher thresholds. Sensitive densification can take place in all areas, sometimes to a greater or lesser extent.

4.3.5 DENSIFICATION WILL RESULT IN A MASS OF APPLICATIONS REDUCING ERF SIZES AND THE LOSS OF AN AREA'S UNIQUE CHARACTER

Although the perception exists that allowing densification will result in a mass of development applications for densification, reality does not bear this out. The densification of towns has historically taken place incrementally driven by market conditions, demographic trends and furthermore, managed densification does not imply an inevitable reduction to the smallest erf size in an area or the highest density permissible. Built environmental aspects related to services, traffic, health or safety heritage, aesthetic considerations and the provision of community facility all serve to ensure a balanced response.

4.3.6 HIGH DENSITY DEVELOPMENTS ARE UNATTRACTIVE AND WILL IMPACT NEGATIVELY ON THE QUALITY OF LOWER-DENSITY RESIDENTIAL AREAS

Source: Internet

This perception has been created by the many existing examples of unattractive and poorly designed development particularly in low-income areas. High density developments that are well designed and integrated into the surrounding environment will be more attractive, both in low-income and high-income areas. There are many examples of acceptable high density developments that have not negatively impacted on the quality of residential areas, but rather positively improved the surrounding built environment.

4.4 MECHANISMS TO ACHIEVING DENSIFICATION

Densification can take place within the developed urban areas of the Overstrand, on vacant infill sites within the developed areas and on greenfield sites that are within the Overstrand's defined urban edges. The general process of densification takes place in a number of ways and to be successfully implemented must be supported and facilitated by a range of zoning and land use regulations and even incentives.

4.4.1 MECHANISMS TO PROMOTE HIGHER DENSITIES

To gain an understanding of the concept of densification it is important that the mechanisms that are generally used to implement it are understood. Internationally three primary mechanisms[2]: have been used to promote higher densities (Behrens R, 1993):

- Measures promoting the "**intensification**"[3] of the existing urban fabric,
- Measures promoting "**infilling**"[4] the development of vacant sites within the existing urban area,
- Measures of "**containment**"[5] confining the outward expansion of urban areas.

Each of these measures has various tools, **not all of which can be considered appropriate** in the Overstrand context.

4.4.2 INTENSIFICATION

- **Second Dwelling (Dual Occupancy)**

Regulations can be set in place, which permit the erection of a second dwelling on an erf as of right, without requiring subdivision. In some instances even a third dwelling has been allowed.

- **Subdivisions**

An erf can be subdivided into smaller portions each with its own title registration. Regulations can stipulate the minimum size of the erven resulting from a subdivision, thereby directly impacting on the density achievable in any one area.

[2] Directly based on the paper written by Behrens R, 1993
[3] "This refers to development within the existing built urban areas which aims to increase densities and improve the quality of the city" (CMC, 1997, p102)
[4] "This refers to development of vacant or under-utilised land within the existing urban area – usually for well-located affordable housing." (CMC, 1997, p102)
[5] "This refers to the concept of limiting sprawling development on the urban periphery and is linked to the strategy for intensifying and compacting the existing urban areas." (CMC, 1997, p101)

- Density Controls

There are a variation of regulations that can be used to control density, this can be applied in terms of a variety of factors namely, coverage, parking parameters, building lines, height, bulk (floor area ratio) and open space requirements. Another variation is the use of a "density map", (overlay zones) in zoning schemes outlining blanket restrictions/requirements in terms of density per area.

- Conditional Rezoning

The Land Use Planning Ordinance, 1985 (Ord 15 of 1985) makes provision for the authorities to lay down conditions with the approval of any development application. This tool enables the public authority to effectively influence the form and character of any one development, in order to achieve a larger planning objective, such as densification, building form and / or preservation.

- Planning Guidelines

These are essentially guiding principles for urban development compiled by the public authority. They are usually area specific and are used to guide developers in establishing a particular development form in their proposals.

4.4.3 INFILLING

- Land Swops

The public authority can enter into a swop agreement to swop a piece of publicly owned land in a favourable location with a private developer who wants to develop land in an inappropriate location.

- Public Housing Programmes

Public authorities can promote "infill" through the initiation of their own development initiatives in well-located areas, where they have publicly owned land. This can, in many instances, create a precedent or example as to the scale and form of development that the local authority is trying to promote.

- Vacant Land Taxation

Infill development can be promoted through the taxing of vacant well-located land. This decreases the likelihood of speculation and encourages development.

- Financial Incentives

Developers can be offered financial incentives to develop higher density "infill" developments. This is done most commonly through the reduction in rates and taxes or bulk / capital contributions, other incentives can also be used.

4.4.4 CONTAINMENT

- Urban Edge

An urban edge is regarded as a defined boundary beyond which urban development is not permitted. This encourages densification and infill within it by stopping land speculation on non-urban agricultural or conservation worthy land.

- Infrastructure Moratoria

Public authorities may place a "moratoria" on the extension of bulk services to certain areas, thereby preventing development pressures from being realised in certain areas until appropriate infill development has taken place in areas where the infrastructure is available and/or underutilised.

- Development Timing

This is a means by which public authorities can control the timing of development through the placing of a "development timing schedule" which allows for the provision of public facilities, bulk services and infrastructure at a set period. The landowner may only develop once the bulk infrastructure is available.

4.5 MEASURING DENSIFICATION

There is no agreed upon measure of what constitutes high, medium and low density. A range of quantitative measures are used to calculate and compare built form and population densities. Some of the commonly used measures are dwelling unit density, population density, and gross base density.

MEASURE	DEFINITION
Dwelling Unit Density	Number of dwelling units per hectare (du/ha).
Population density	Number of people per hectare (usually calculated by multiplying the number of units by an appropriate average household size).
Building density	Ratio of total floor area of buildings to the corresponding site.
Gross du/ha	The number of dwelling units per hectare of land calculated in a designated area on the basis of land used for residential purposes and other land uses such as industry, commerce, education, transport and parks. Excluded are land – extensive land uses such as agricultural land and nature areas / reserves / parks.
Nett du	The number of dwelling units per hectare of land calculated on the basis of land used for residential purposes including the garden and off-street, if any.
Gross base density	The average number of dwelling units per hectare across large areas of a town or the municipal urban area as a whole, excluding land-extensive uses such as agricultural and rural land and large nature areas / reserves / parks.

Table 1: Measures of densification

For the purposes of this study, density will be expressed in gross dwelling units (du) per hectare (ha)

SECTION C
POLICY FRAMEWORK

5. THE OVERSTRAND GROWTH MANAGEMENT POLICY

5.1 GOAL

The goal of this Growth Management Strategy is to improve the Overstrand Municipality's overall environmental sustainability by enhancing the quality and efficiency of the built environment.

5.2 OBJECTIVES

This growth management objectives are to:

- Ensure optimal land use planning and the efficient use of infrastructure, services, facilities and land,
- Improve levels of access, especially for the poor, to the region's resources and amenities,
- Provide a framework and clear guidelines for the assessment of local level development proposals that promote densification,
- Provide inhabitants, property owners and property investors with a level of certainty regarding the densification areas and the various forms of densification foreseen,
- Protect, manage and enhance the natural and built environment and landscapes,
- Ensure that the scale and character (in terms of bulk, height and architectural styling) of the higher density areas are appropriate to the immediate context,
- Support the development of mixed land uses providing for vitality, opportunities and integrated living environments,
- Contribute to place making and the development of attractive and safe urban environments.

5.3 STRATEGY

The strategy aims to achieve a targeted increase in the average gross base density of the Overstrand urban area by encouraging higher levels of densification at selected and specified spatial locations (including parts of certain residential areas) together with lower levels of incremental densification where considered contextually appropriate and feasible. An integrated area specific implementation approach has therefore been followed.

5.4 Ddensification POLICY

The implementation of the growth management strategy will be guided by the following four policy statements:

- Adopt an area specific densification strategy that sets a gross base density (average density) that is deemed appropriate for a specific context.
- Growth Management Densification decisions should be guided by an area specific local framework and balanced by resource limitations and infrastructure availability/phasing.
- Densification must be facilitated through a range of planning, regulatory and fiscal measures as well as communication strategies.
- Densification must be proactively promoted in identified densification priority zones.

5.4.1 POLICY 1

Adopt a balanced growth management strategy that sets a gross base density (average density) per planning area

To achieve an appropriate increase in the gross base density (average density) across the urban areas of the entire Overstrand Municipality, short (five year) and medium to long term targets for increasing density must be determined. These area appropriate targets to be linked to the provision of the necessary infrastructure and community facilities.

In this regard, higher levels of densification must be encouraged at specified spatial locations, with lower levels of incremental densification (eg. second dwellings and property subdivisions) being permitted across the Overstrand, where appropriate, and feasible in terms of available service infrastructure and community facilities provision.

5.4.2 POLICY 2

Growth management decisions should be guided by an area specific local framework and balanced by resource limitations and infrastructure availability / phasing

Decisions regarding the location, form, scale, height and orientation of densification should be guided by:

- location assessment criteria;
- the locations targeted for densification in terms of the spatial structure of the Overstrand and its associated density guidelines;
- contextual conditions;
- density design guidelines; and
- the Overstrand-wide Spatial Development Framework (SDF) and Local Growth Management Plans.

• Generic considerations for densification

Particular issues require consideration when identifying and evaluating areas or locations for higher density development, especially where densities are in excess of 25 du/ha (gross) or where erven are less than 200m² in size.

• Spatial location criteria and density parameters

The middle to high density areas/locations should generally be located in proximity to public transport, development and activity routes (or in parts thereof), at transport interchanges and intersections, within or proximate to urban nodes / centres and mixed use areas, and around social facilities / institutions, public open spaces (especially parks) and amenity areas.

• Guiding contextual informants

Density decisions with regard to spatially defined/designated higher density areas/locations as well as other sites identified for high density development need to be guided by contextual informants such as land use, built and heritage environment, infrastructure, availability of community facilities, social and economic context, and natural environment.

• Density design guidelines

The impact of densification on the quality of the built environment is affected by the design of buildings and spaces and the minimum subdivision size of properties.

• The role of spatial plans

The Overstrand-wide SDF, the growth management strategy and local / density plans need to support the proposals contained in this strategy by identifying the areas to be targeted for densification; and identifying areas where density plans should be prioritised.

The 5 year prioritisation of densification intervention areas should be guided by the following criteria:

- the desirability of densification in the targeted area (from the perspective of location, access to public transport and spatial structure),
- the likelihood of densification in the targeted area (based on market trends and the affordability and acceptability of the product by the target market),
- the targeted areas contribution to urban restructuring and social / economic integration,
- providing or contributing to a solution to a specific problem being experienced in a specific area,
- availability of the required Community Facilities, and
- availability of Civil Services.

The local area densification plans should support the growth management strategy by:

- identifying areas for densification on a street block and where appropriate on erf basis and establishing density parameters for these. Where appropriate, minimum density and/or subdivision standards should be set;
- establishing location-specific design guidelines and, where appropriate, maximum and/or minimum height restrictions; and
- where appropriate, delineating subject areas and drafting the parameters for incorporation into the Integrated Zoning Scheme (IZS) as overlay zones.

It should be noted that local / densification plans may need to replace existing local area density plans and conflicting policies that are in operation. Stakeholder engagement and communication regarding the density proposals is therefore important.

5.4.3 POLICY 3

Facilitate growth management and densification through a range of planning, regulatory and fiscal measures as well as communication strategies

Section 4.4 of the report outlines the mechanisms that can be used to encourage densification. The selection of potential mechanisms has been informed by the factors limiting and facilitating densification, and existing density patterns and trends. They can be divided into two broad categories, namely:

- the overall measures for achieving higher densities across the Overstrand Municipal area, and
- the measures that could support densification in specific locations.

- Municipal-wide Mechanisms

Regulatory and zoning measures – these should be included in the Cape Town Integrated Zoning Scheme (IZS). Examples are increased building heights, overlay zones and overlay bonuses in the form of increased bulk.

Space standards – new integrated space standards for the provision of community facilities and open space need to be prepared for the Overstrand Municipal area. The revised policy must encourage land use integration and the efficient use of open spaces and facilities through clustering / sharing.

Development containment – the urban edge is a form of development constraint. Council may restrict development in an area which has severe infrastructure capacity constraints by delaying the provision of services in one area and providing infrastructure in another area.

Incentives / disincentives – the following could be investigated:

- Municipal rates differentials which encourage higher density development in targeted locations.
- Increased developer contributions/levies for low density development.
- Fast-tracking of desirable land development applications in priority zones.

Communications and information – targeted at internal and external stakeholders and the general public. It includes the distribution of information motivating the need for urban densification, growth management and demonstrating its benefits.

- Mechanisms in targeted density areas

Local area densification plans – the preparation of specific local areas densification plans and their approval as a policy.

Regulatory and zoning measures – this involves the application of the zoning scheme overlay mechanism and could include maximum erf sizes, or minimum gross/net densities, together with increased height, bulk and coverage in residential areas. In commercial areas and mixed use areas additional bulk could be allocated using the overlay zonings.

Design frameworks and guidelines – prepared for sensitive heritage areas, as well as sites and precincts requiring urban and building design frameworks and guidelines.

Research and development – financial and institutional mechanisms that would support the development of a greater variety of innovative higher density housing forms particularly in affordable housing areas within the Overstrand.

5.4.4 POLICY 4

Proactively promote densification in identified densification intervention zones

In the short-term densification will be prioritised in the following locations:

- areas where the existing zoning rights / policy frameworks support higher density development,
- urban infill sites, and
- greenfield developments on the edge of existing urban development within the urban edge. The appropriate mechanisms identified in Policy 3 and a communication and information strategy should be put in place to support the densification of the prioritised intervention areas.

- Areas where existing zoning rights / policy frameworks support higher density development

The areas to be targeted should have a zoning and be located in an areas which supports the overall objective of densification. The existing water, electricity, waste water and storm water infrastructure needed to support the projected take-up of rights needs to be in place or planned within the next five years. Alternatively, where appropriate, the development must be able to cover the costs of the required upgrading.

- Infill Sites

The development of these sites should be guided by the Growth Management Strategy and should, if appropriate, be at a higher density than the adjacent properties.

- Greenfield developments on the edge of the existing urban development within the defined urban edge

The development and zoning of these areas should be guided by the targeted gross base density (Policy 1) and the Density Decision making Framework (Policy 2). A design framework/ precinct local plan may be required to guide the densification of properties larger than one hectare.

6. STRATEGIC CONSIDERATIONS

The Overstrand Municipality covers a geographic area of high environmental and cultural historical significance. This requires that growth and development needs to be carefully managed to ensure the conservation and enhancement of the areas environmental and heritage resources.

In order to achieve the above, this report's point of departure is to firstly, compile a Growth Management Strategy, for the Overstrand, that is based on an understanding of how the various towns and villages that make up the Overstrand function and perform. Secondly, to determine what the specific strengths and weaknesses of an urban area are, and thirdly, how growth and densification can be used to address identified local problem areas. Critical to achieving this, is ensuring that areas of environmental quality (built and natural) and heritage significance are conserved and improved.

6.1 KEY STRATEGIC QUESTIONS

The key strategic questions regarding the implementation of this strategy are:

- What level of densification (residential units per gross hectare) should the Overstrand Municipal authorities aim for?
- Where should the various types of densification take place and what form should densification take?
- How can the densification process be facilitated, as part of a broader growth management strategy?

6.2 IMPLEMENTATION CONSIDERATIONS

To effectively achieve the application of appropriate increases in residential densities, it was clear from the analysis and synthesis phases (as set out in section 7.2 to 7.4 of this report), that the following overarching considerations should inform the formulation of the densification and development proposals.

- **Densification should not be applied uniformly throughout an urban area.** There are many areas within the towns and suburbs of the Overstrand area where densification would be totally inappropriate. Localised factors that require careful consideration in the densification process are the natural and built physical context, heritage aspects, the land use and the social and economic context.

- **The process of densification must be viewed as an integral part of a broader strategy to improve the quality of the urban environment.** It should be linked directly to programmes aimed at improving the function of open spaces, integrating communities, public transport, social services and achieving economic thresholds.

- **Town planning, urban design and heritage aspects affect the general acceptability of high density developments. The following aspects will therefore require careful consideration when implementing higher densities. namely:** building design, building orientation, scale of development, urban design context, landscaping improvements, heritage considerations, etc.

6.3 CONTEXTUAL ASPECTS

Further to this, the effective realisation of appropriate increases in densities is directly influenced by contextual and local area conditions, relating to land use, urban design, heritage, landscape setting, infrastructure provision, community service provision, socio-economic trends and demographics. The salient contextual aspects are discussed below.

6.3.1 LAND USE

The general land use character of an area is important when considering the suitability of higher density development. Urban areas (existing or planned) characterised by a diverse land use mix (including different types of residential development) and a fine built grain of development, are best suited as locations for higher densities. If an area is primarily single dwelling residential, it is generally less suitable for higher density development than areas with flats and mixed land use developments. This is dependent on the form of the higher density development proposed in a specific area.

Higher density development needs to be carefully evaluated if it is to enhance or uplift the built character of an area or the surrounding environment. Alternatively, the development needs to be compatible with an area, especially if the area has a unique or valuable built character.

6.3.2 URBAN DESIGN

The growth management strategy needs to take into consideration the contextual realities related to the various towns and villages falling within the urban edge as identified in the Overstrand SDF and generally accepted heritage and urban design principles relating to the creation of positive public living environments. Heritage and urban design principles are interlinked and in the interests of the multi-disciplinary approach to this study, they are presented here in an integrated manner. The heritage related principles are derived from a number of UNESCO based International Charters on conservation and the urban design principles have been drawn from a wide range of internationally published papers on the subject[6].

- **Authenticity and Integrity**

Authenticity and integrity are regarded as the key components and the essential element in any heritage activity. Authenticity refers to what is considered to be true and original in relation to the significance of a site or landscape. Each heritage resource thus reflects a unique expression resulting from a particular historical process and the context within which this has occurred. The original fabric, its character and use, determine its value and can be read as a historical record reflecting its historical significance and cultural value. The authenticity of heritage site and the integrity of cultural landscapes are negatively affected when attempts are made to copy or mimic the form and architectural character of heritage sites. New developments should rather interpret historical forms in a contemporary manner and should be in visual harmony with the built and natural context.

- **Character**

Character refers to places with their own identity and "sense of place". New growth needs to positively respond to and reinforce locally distinctive patterns of development in the townscape and landscape to ensure that character is maintained and enhanced.

This requires an appropriate response to, inter alia:

- The three dimensional shape of the landscape which give settlements their form,
- the conservation of natural features such as riverine systems, wetlands and rocky outcrop and landmarks which provide the linkage between settlements and their environment,
- the establishment of green corridors linking the mountainside to the coastline to integrate new development to the wider landscape,
- the use of local plant species and tree types in new developments to enhance local distinctiveness,
- the retention of existing street patterns and positive public spaces to ensure that new developments relate to the existing, that streets are connected and public spaces complement one another,
- the retention of the continuity of the built fabric and buildings and townscapes of local heritage significance,
- the retention of local building forms and patterns of development, in particular positive house-street relationships,
- the use of local materials and building methods and detailing,
- the existing scale, massing and height of buildings in the immediate vicinity; the topography or landform; the general pattern of heights in the area; and views, vistas and landmarks.

[6] Townscape in Urban Conservation, Unpublished D.Phil thesis, Baumann, N.E. Institute of Advanced Architectural Studies, York University 1997, By Design, Urban Design in the planning system: towards better practice, Commission of Architecture and the Built Environment, 2000. Responsive Environments: A Manual for Designers, Bentley, et al, The Architectural Press, London, 1985

- Accessibility and permeability

Accessibility and permeability refers to the need to create places that connect with one another and that are easy to move through, and the need to ensure that access to significant environmental resources, such as the coastline and mountainside, is not blocked by future developments. Urban areas should be open to all regardless of age, ability, background or income. People should take precedence over traffic and land uses need to be closely integrated with transport. Accessibility and permeability can best be achieved by:

- A well designed urban structure with an interconnected network of connected spaces and routes and a clear distinction between urban and rural places;
- a high degree of connectivity with existing routes and movement patterns;
- minimising walking distances between major land uses, points of destination and public transport facilities;
- designing streets as public spaces rather than in response to traffic engineering considerations alone;
- the creation of a fine-grain network of direct and connected routes rather than large blocks;
- the encouragement of higher densities along major movement routes to promote public transport.

- Legibility

Legibility refers to places that have a clear image and that are easy to understand. New development needs to create recognizable routes and intersections and visual linkages to landmarks and environmental features such as the mountainside and coastline to help people find their way around.

Legibility can be enhanced by:

- Siting new development to enhance existing views and vistas of landscape features and landmark buildings,
- ensuring that the design of the public realm contributes to a local area's character and design in terms of land uses, hard and soft landscaping inter alia,
- concentrating the most active uses and higher residential densities on main routes and around focal points that will contribute to the vitality of a place,
- locating civic and community buildings around public spaces to provide symbols for community life and a focus for civic life,
- the creation of gateways or thresholds to mark the transition from rural / agricultural to urban and to mark places of local distinctiveness.

- Robustness and adaptability

Robustness and adaptability refers to the need to create spaces and buildings that can change relatively easily to changing social, technological and economic conditions and which can accommodate a wide range of land uses. The basic structure of places should be grounded in the relatively unchanging and constant patterns of human life rather than being designed for some very specific use.

Robustness and adaptability can best be achieved by:

- Designing places which can be used for a wide range of activities such as markets, events and festivals;
- designing places that have flexible layouts. Fine grain developments are easier to adapt than large scale mega structures.
- planning the layout and capacity of service infrastructure (water supply, storm water, sewerage and electricity etc.) to take account of probable changes in demand in areas identified for future growth.

- Diversity and mixed use

Diversity and mixed use refers to the need to create places of variety and choice that work together to create viable and positive public places that respond to a range of local and regional needs. Mixed use may be appropriate at a variety of scales; from building, street, neighbourhood to village or town. Higher densities and intensive activities at locations with good access to public transport can provide the opportunities for a wide range of accommodation needs for different age and income groups.

Diversity can be enhanced when:

- The appropriate mix of activities is achieved at different scales to attract people to the area;
- different groups of people can use the same space at different times of the day;
- uses are compatible with one another and interact positively with one another;
- a considered attempt is made to create spaces which are responsive to a range of cultural and income groups;
- buildings of different sizes and types are planned to accommodate a range of income and age groups;
- social inclusion and integration is provided by well designed building types which are not easily distinguishable from private housing.

- Qualitative public spaces

Qualitative public spaces refers to the need for local authority investment in places and routes that are attractive and safe for all members of the community and which provide the enabling structure to encourage private investment.

The public realm is made up of the parts of the village or town that are available to all. Quality is a function of the relationship to major movement routes, adjacent land uses, orientation, street furniture, paving, planting etc.

Public spaces work well when:

- Ground floors are occupied by uses that relate directly to passing pedestrians and which contribute to a sense of vitality and interest;
- street entrances occur at frequent intervals to ensure activity;
- they are overlooked by natural surveillance;
- the design has taken local climatic conditions into consideration;
- there is an interrelated system of accessible open and green spaces which respect natural features and landmarks such as riverine systems, wetlands and rocky outcrops.

6.3.3 HERITAGE AND CULTURAL LANDSCAPE

The growth management strategy should take into consideration the contextual realities relating to the various towns and villages falling within the urban edge as identified in the Overstrand SDF, as well as the generally accepted heritage and urban design principles relating to the creation of positive public living environments. Heritage and urban design principles are interlinked and in the interests of the multi-disciplinary approach to this study, they need to be assessed in an integrated manner.

The understanding of scale is critical in the analysis of existing heritage and place making qualities in the Overstrand. Individual heritage sites are often embedded within larger precincts which in turn form part of a broader cultural landscape. The understanding and analysis of the totality of the landscape is thus regarded as essential to the understanding of individual places and their ability to accommodate future growth. To this end, the nature of heritage significance needs to be understood at two broad scales, the overall Overstrand cultural landscape, and the scale of settlements embedded within this landscape. It should be noted that the Overstrand Heritage Survey[7] has identified significance at the different scales in detail and only a summary is included here. The purpose is to provide a contextual analysis of heritage and place making qualities which the growth management strategy will have to address.

The following points identify the underlying structure of the Overstrand cultural landscape to which the growth management strategy needs to respond:

- The tendency for settlements to locate on the relatively flat coastal terraces and coastal plains, below the rolling foothills, with good soils derived from weathered granites and shales and where farming has traditionally occurred, and below the mountain massive with its sandstone cliffs and steep scree slopes which, because of its ruggedness, are mostly natural landscapes.

[7] Landscape Character Analysis, Overstrand Heritage Survey, Bernard Oberholzer Landscape Architects, November 2008

- **The extent to which the physical characteristics of the landscape have influenced land use and settlement patterns over time.** The patterns of landforms, soils, vegetation types, cultivation and human settlement are a strong reflection of the geological structure of the area. The distribution of the landscape types provides a logical division of the area into a series of identifiable landscape units each having a particular scenic quality and sense of place[8].

- **The substantial natural, scenic and cultural value of the area as a whole.** The juxtaposition of ragged sandstone mountain ranges with rocky and sandy coastlines and river estuaries, most of which are in a pristine state, constitute a natural and cultural resource with significant tourism and economic value for the region. The ecological value of the endemic fynbos vegetation types has led to the formation of a number of reserves in the area, such as the Kogelberg Biosphere Reserve, which have regional and national significance[9].

- **The relative spatial proximity between mountains and the coastline, with its associated estuaries, lagoons, and dune fields, and the existence of a number of green visual and ecological links between the two dominant systems** which contribute to a green structuring framework which is unique in terms of national natural landscape patterns and which should inform the growth management strategy.

- **The range of scenic routes and corridors which run as a thread through the study area and which have particular significance** when they interface with areas of high scenic value. The routes have regional and local significance, and include the Whale Route, the Shark Route, the Wine Route, the Fynbos Route and various birding routes which all contribute significantly to the cultural tourism value of the area as a whole[10].

Higher density development areas should not negatively impact on the landscape and scenic aspects of the surrounding natural environment, or on the operation of natural systems. The location, orientation, scale, height, and design of higher density development in scenic and sensitive landscapes should be adjusted so as not to negatively impact on the surrounding natural environment. The Overstrands existing distinct pattern of urban settlement on the relatively flat coastal plains between the Mountain scree slopes and the coast edge provides a logical spatial division of the settlement area. Each of these bands, within the urban settlement area, require an appropriate and informed development response.

Based on the above, a conceptual structuring diagram can be formulated which illustrates the application of the guiding principles related to heritage and urban design in the particular contextual and spatial qualities evident in the Overstrand's urban landscape. It attempts to provide a spatial dimension to the guiding principles identified below. The diagram (*Figure 5*) is in the form of a grid with, in approximation, the mountainside forming the northern edge of the grid and the coastline forming the southern edge.

The Overstrand Heritage Survey and Heritage Development Guidelines established the significance of the particular environmental context of the Overstrand in contributing to the character of the place and the nature of the built form. In particular, urban settlements occur as nodes which generally sit lightly in a dramatic rural landscape. **Two strong and highly visible edges; the mountain ranges to the north and the coastline to the south provide the natural landscape frame within which the villages are located on the coastal plain.**

It is vital that this frame is maintained and enhanced to ensure that future growth does not impact negatively on the existing sense of place and character evident in the Overstrand. To this end management zones have been identified as part of the growth management strategy. They relate to the band of development at the interface between development on the upper slopes and the natural mountainside and the interface zone between development and the coastline.

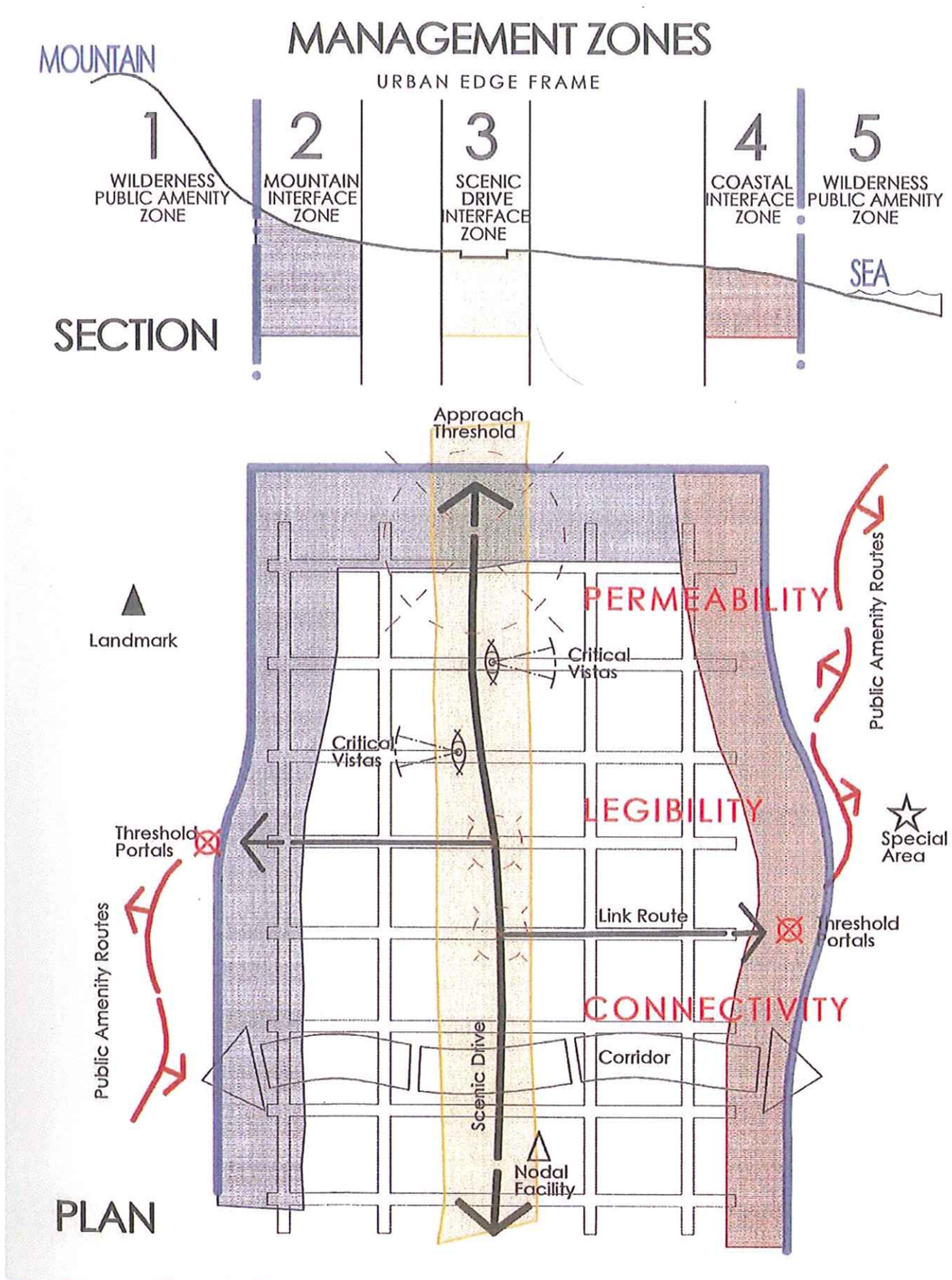
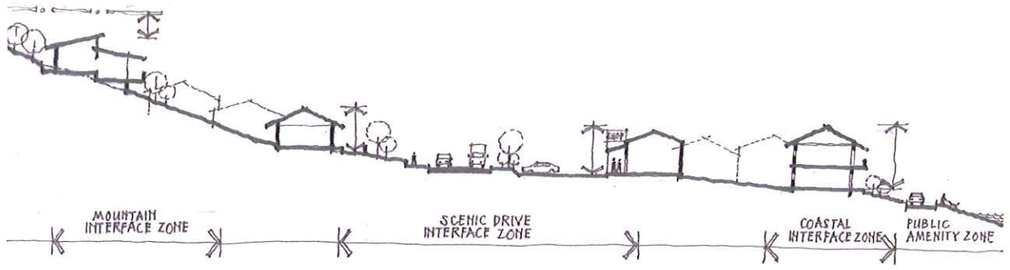


Figure 5: Conceptual Structuring Diagram...

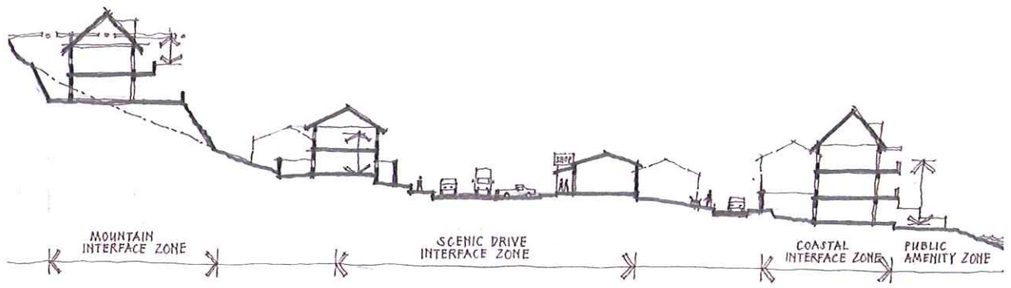
8 Landscape Character Analysis, Overstrand Heritage Survey, Bernard Oberholzer Landscape Architects, November 2008

9 Landscape Character Analysis, Overstrand Heritage Survey, Bernard Oberholzer Landscape Architects, November 2008

10 Landscape Character Analysis, Overstrand Heritage Survey, Bernard Oberholzer Landscape Architects, November 2008



DESIRABLE FORM OF DEVELOPMENT



UNDESIRABLE FORM OF DEVELOPMENT

11.

Figure 6: Desirable and Undesirable forms of development

To ensure a soft, green and permeable zone of transition along the upper slopes, a management zone comprising the uppermost row of erven at the interface with the natural mountainside has been identified. Management guidelines need to be formulated for this zone to control building coverage, massing, height and form and to ensure that building form is integrated with the natural environment rather than being imposed upon it. Building platforms set high on pillottis should for example not be permitted in this zone.

The management zones identified do not occur along the entire interface but are restricted to those areas where the mountain backdrop is regarded as contributing significantly to the sense of place of the local area. They generally occur along the 120m contour line but are not restricted to this contour.

The management zones identified along the coastline relate to the first row of erven facing onto the coastal edge along which in most instances a public right of way in the form of a cliff path is located.

The public open space related to the coastal zone and the nature of the built form response which is relatively fine grained and which contains a limited amount of early historical fabric, contributes substantially to the character of the place and community associations with the area and the coastline in particular. They are considered to have a high social and aesthetic significance.

The management zones identified along the coastal edge relate largely to special area Heritage Overlay Zones, identified as part of the Heritage Survey, where the existing nature and grain of development has been identified as contributing substantially to local character and worthy of protection. The purpose of the incorporation of these management zones into the Growth Management Strategy is to channel growth away from areas identified as having heritage and visual significance to areas which are considered to have greater capacity to absorb future growth.

The following **guiding principles** informed the contextual analysis, synthesis and interventions / proposal phases of the process:

- The **identification of public amenity bands** of visual and environmental sensitivity along the mountainside and coastline which have very limited opportunities for future growth. Strict controls are required to control height and massing in these zones to ensure a sensitive green interface with the urban areas.

- The **opportunities for urban intensification** along the main route which bisects the existing urban footprint in most towns and villages in the Overstrand. Intensification should not occur in a strip, linear form, but should be nodal and should be aligned at a right angle to the main route, linking this route to points of natural opportunity and existing destination points such as the harbour at Jongensklip / Kleinmond

- The **alignment of green corridors** predominantly associated with riverine conditions, linking the mountainside to the coastline. It is these two natural systems which provide the dominant structuring element to the Overstrand, and their linkage in the form of green, predominantly east-west aligned corridors will contribute to a distinctive urban structure and form to the area.

- The **visual linkage of natural landmark features**, such as Hoy's Kop in Hermanus, and major public spaces and landmark buildings into the nodal points identified to contribute to distinctive place making qualities in these zones.

- The **identification of interface zones** between the zone of intensification around the main road and the mountainside interface to the north and the coastal zone interface to the south which require special controls to ensure an appropriate gradation of intensification from the central spine to the periphery.

- The **identification of threshold conditions** at the points of entry into towns and villages to mark the transition between urban and rural and to reinforce the sense of local distinctiveness, through, inter alia, landscaping interventions utilising place specific plant types, materials, etc.

6.3.4 INFRASTRUCTURE PROVISION

Densification or further development should not be implemented where water, waste water and stormwater capacity is reaching points of absolute constraint and the cost implication of rectifying the situation is too high for the private sector / or not planned for upgrading by the municipal authority within a five year time frame. In this regard the following points should be noted:

- Infrastructure capacity is a vital factor for the accommodation of higher-density development in the existing and greenfield areas of the Overstrand. The demand for increased infrastructural capacity with respect to densification patterns / trends and spatially selected / designated areas, requires strict co-ordination, monitoring and planning for infrastructural upgrading and provision. The local authority should use this strategically to ensure that development densification is facilitated in the appropriate areas.

- Market forces often determine the provision of infrastructural services to locations of new housing and commercial developments (new growth areas). This has deferred investment away from older areas which are in need of infrastructural upgrading and expansion. These areas are often better suited to densification for reasons of location, diversity, mixed uses and access to public transport. Areas therefore need to be identified within the Overstrand where surplus infrastructural capacities exist and / or where development rights have not been taken up (especially General Residential and Business / commercial zonings permitting higher-density development).

- The potential capacity of road infrastructure to accommodate larger flows of traffic needs to be assessed during the statutory assessment stage. This includes impacts of road infrastructure on architectural character, the grain of built development and built heritage. If for economic or other technical reasons it may not be possible to accommodate required traffic road infrastructure without negatively altering the existing built context, or compromising the surrounding built environment to an unacceptable level, the development proposal should not be implemented.

Alternatively, localized public transport solutions should be implemented to reduce peak hour traffic congestion.

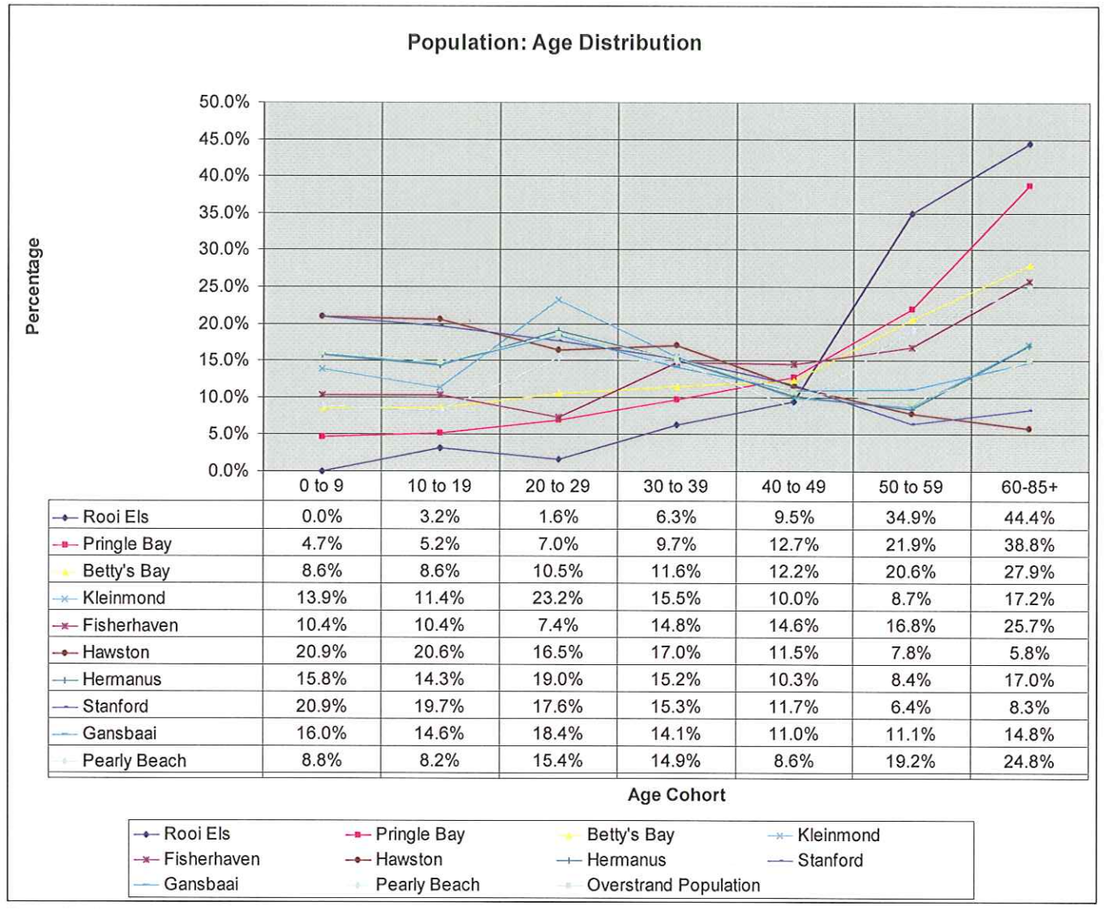
6.3.5 COMMUNITY FACILITIES PROVISION

- In the Overstrand all age cohorts recorded positive growth between 2001 and 2006 with particularly high growth in the 85+ year age cohort. Faster growth was also registered for the 70 – 74, 75 – 79 and 30 to 34 years age cohorts. (Western Cape Socio Economic Profile: Overberg District 2006, Chapter 3 p50).

- The following *Figure 7* illustrates the age cohorts of the different towns in the Overstrand Municipal area where the age distribution provides inter alia an indicator of the function and character of each of the towns. Based on this data, it is clear that the demographic composition of the Overstrand area is in many areas skewed towards either a very young school going population and retired persons or one of the two or both. This makes the application of the community facilities provision most difficult given that the existing Provincial space standards assume a balanced demographic age composition profile. A more accurate area specific community facilities provision standards and mechanisms will have to be developed by the Overstrand Municipality to ensure the timeous and appropriate provision of community facilities in the areas where they are needed.

6.3.6 SOCIO-ECONOMIC FACTORS AND MARKET TRENDS

Over the last 10 – 15 years there has been a trend towards higher-density development in the form of town houses, flats, group housing, loft apartments, etc. in many middle to higher-income areas of the Overstrand. The reasons are security, savings on maintenance, convenience, and developer profit maximisation. Although at higher densities, many of these developments within the Overstrand are gated and often poorly designed and not in appropriate locations to access or support public transport.



	0 to 9	10 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60-85+
Rooi Els	0.0%	3.2%	1.6%	6.3%	9.5%	34.9%	44.4%
Pringle Bay	4.7%	5.2%	7.0%	9.7%	12.7%	21.9%	38.8%
Betty's Bay	8.6%	8.6%	10.5%	11.6%	12.2%	20.6%	27.9%
Kleinmond	13.9%	11.4%	23.2%	15.5%	10.0%	8.7%	17.2%
Fisherhaven	10.4%	10.4%	7.4%	14.8%	14.6%	16.8%	25.7%
Hawston	20.9%	20.6%	16.5%	17.0%	11.5%	7.8%	5.8%
Hermanus	15.8%	14.3%	19.0%	15.2%	10.3%	8.4%	17.0%
Stanford	20.9%	19.7%	17.6%	15.3%	11.7%	6.4%	8.3%
Gansbaai	16.0%	14.6%	18.4%	14.1%	11.0%	11.1%	14.8%
Pearly Beach	8.8%	8.2%	15.4%	14.9%	8.6%	19.2%	24.8%

Figure 7: Age cohorts of the Overstrand Municipality's towns (Source: Statistics South Africa, 2001)

However, land use patterns are now changing with increasing demand for higher residential densities and mixed uses in appropriate locations, such as in established and emerging business locations (activity streets / routes, nodes and commercial complexes). Market forces are a factor that can be positively used by the local authority through various planning regulations and incentives to facilitate the development of well-designed appropriately developed higher densities. This will be easier to achieve in the middle to higher income section of the property market although innovative mechanisms will have to be found to create appropriate affordable higher density housing for the lower, middle and subsidised income groups.

There is therefore now a critical need for the Overstrand Municipality to provide guidance and strong support to the densification momentum in the market by directing higher density development to suitable locations and putting in place mechanisms / measures and incentives / bonuses that encourages appropriate densification and a range of affordable housing options.

6.4 OVERALL OBJECTIVES OF THE GROWTH MANAGEMENT STRATEGY

Following from an understanding of the particular contextual qualities of the Overstrand and the aforegoing strategic considerations, the following six key objectives have strongly informed the proposal phase of this study, as set out in section 5 of this report.

- The promotion of a **more compact, denser, efficient and environmentally sustainable urban form** which reinforces the existing pattern of nodal development along the main movement corridor on the coastal plain.

- The **protection and enhancement of environmentally sensitive zones** such as the mountain slopes, wetland systems including lagoons, estuaries and rivers, and significant cultural landscapes, character areas and heritage sites which have been identified as part of the Overstrand Heritage Survey.

- The **management and channeling of growth into areas which can accommodate growth without adverse environmental and heritage impacts** and which can contribute to the addressing of past social and economic inequalities and the spatial dislocation between advantaged and disadvantaged members of the community.

- The **creation of positive public spaces**, accessible to all, where appropriate, strategic public investment can trigger maximum private investment.

- The **identification of a range of opportunities and constraints** to give direction to the growth management strategy and to identify areas requiring maximum to minimum control to protect existing environmental and heritage resources.

- The **rationalisation of the supply of bulk infrastructure** to ensure that bulk capacity is provided to areas considered appropriate for growth and development.

SECTION D
GROWTH MANAGEMENT INTERVENTION

7. CONTEXTUAL ANALYSIS SYNTHESIS AND DENSIFICATION INTERVENTIONS / PROPOSALS

The objective of this section of the report is to provide the contextual analysis and synthesis of each of the different identified Planning Areas (refer to *Figure 8*) and the densification intervention proposals, made for each Planning Unit, within the specific Planning Area. For ease of use, each of the planning areas (defined for the purposes of this study) and their specific planning units have been dealt with separately as geographic units in terms of the plan sets and text. The 14 geographic plan sets / areas are listed below:

- Rooi Els
- Pringle Bay
- Betty's Bay
- Kleinmond
- Fisherhaven
- Hawston
- Hermanus West
- Hermanus Central
- Hermanus East
- Stanford
- De Kelders
- Gansbaai
- Kleinbaai / Franskraal
- Pearly Beach

In terms of the methodology followed (refer Section 3) the salient data captured, in the analysis and synthesis phases of the study, is included in these plan sets. This will provide the user with the information used to formulate the densification proposals.

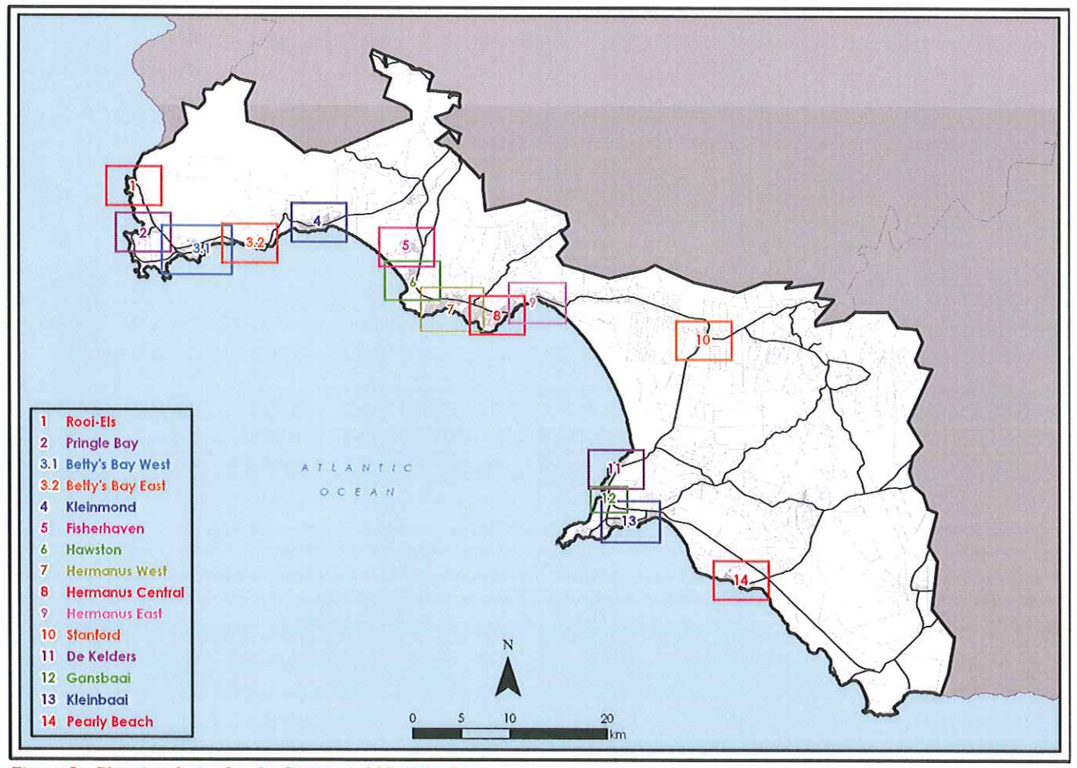


Figure 8: Planning Areas for the Overstrand Municipality

The technical objective of the study was to formulate a set of integrated area appropriate densification interventions for each Planning Area / Unit based on the **theoretical assumption that all the required infrastructure and community services were installed and available. This methodology allowed the professional team to determine the theoretical maximum appropriate limit to urban development within the defined urban edge of a planning area.** The proposals, contained in this section of the report, collectively illustrate the theoretical maximum threshold for urban development in a specific area. This densification projection target should nevertheless always be viewed as an indicator of the urban areas maximum theoretical propensity to densify / develop based on available current information, technology and climatic conditions, etc.

It should be clearly noted that the densification proposals and growth management interventions are by definition normative based on the professional team's collective assessment of the aforegoing qualitative and quantitative analysis of the Overstrand's urban environs.

In the implementation phase of the growth management strategy (refer Section E), the theoretical maximum densification intervention / development proposals for each of the planning areas were assessed and the priority areas for the next five years were identified. The reality being that urban development / densification can only proceed, in a specific area, if the bulk resource capacity and infrastructure, as well as community services required are installed and available.

To glean a clear understanding of the densification intervention proposals, the text section of the report should be read in conjunction with the respective related proposal plans which includes a detailed proposed intervention table providing information in terms of:

- The Density Interventions / Development Proposals,
- The assessment of the Civil Services Capacity, and
- The assessment on Community Facility provision.

7.1 DENSITY INTERVENTIONS / DEVELOPMENT PROPOSALS

The Density Intervention section of the Proposal Intervention Plan table provides information per Planning Unit on the following aspects:

- The Planning Unit reference number,
- The total area (ha) of the Planning Unit,
- The existing number of residential units located within the specific Planning Unit,
- The existing density (gross residential units per hectare) of the Planning Unit,
- The Densification Consideration / Intervention proposed for the specific Planning Unit,
- The built height restriction applicable to the proposal,
- The assumed gross residential developable area (ha) of the Planning Unit,
- The proposed increased gross residential units per hectare density following the proposed densification intervention / proposal,
- The potential total number of residential units following the proposed densification intervention / proposal,
- The potential number of additional residential units to each planning unit and the total increase of residential units for the planning area.

The proposed Densification interventions, per planning unit, should be interpreted in conjunction with the housing typology matrix table (refer *Annexure C*). The function of this table is to give the user of this report, a clear indication of the type of housing that is foreseen in a specific area. This will allow the user to interpret the density quantification (ie. residential units per ha gross) proposal for a specific area in terms of what specific housing type is actually proposed (ie. built form, height, etc.). This matrix illustrates the density range for various residential development typologies, as well as the development types. Based on the various proposed densification interventions, the potential theoretical maximum number of dwelling units and housing type, deemed appropriate for that specific Planning Unit, has been calculated.

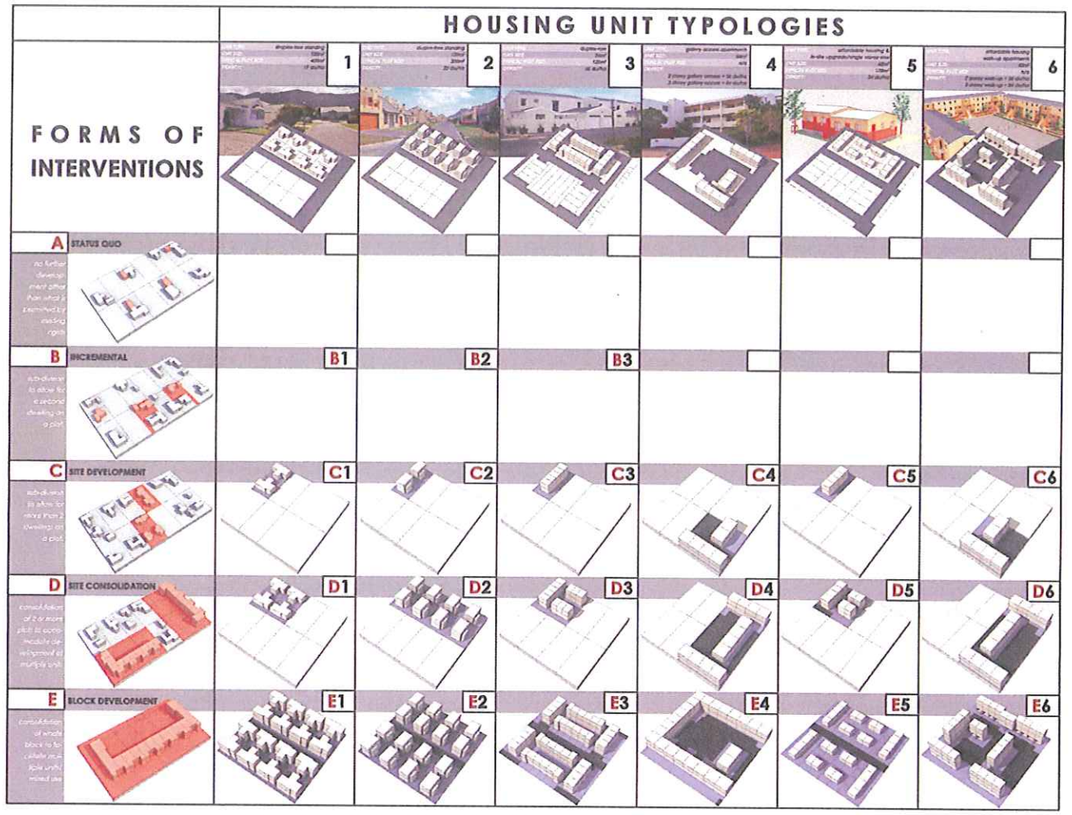


Figure 9: Housing typology matrix table – photographs of housing types per category

Figure 10: Housing typology matrix table

7.2 ASSESSMENT OF CIVIL SERVICES CAPACITY

Based on each of the Density Intervention Proposals per planning area / unit, the impact of the Civil Services, in terms of the availability of services are illustrated in the Impact on Civil Services section of the table. Only three categories of impact are indicated. These categories are indicated as being sufficient **spare capacity, no spare capacity** and **further investigation required** should no clear answer be available as to whether services are available. The following aspects of Civil Services provision have been taken into account:

- Water Source,
- Water Network,
- Water Treatment Works,
- Sewerage Network,
- Sewerage Waste Water Treatment Works,
- Storm Water,
- Eskom Input,
- Electricity Network,
- Collector Roads, Local Roads, and
- Solid Waste.

7.3 ASSESSMENT OF COMMUNITY FACILITIES PROVISION

The section of the Proposal Plan table assesses the impact on the Community Services and provides information on the number of existing community facilities in a specific planning unit area, the number of community facilities required in terms of the existing Western Cape Provincial Government standards for the provision of community facilities and the recalculated number of facilities now required based on the densification intervention proposals (ie. that proposed increase in residential units. The community facilities needs assessed in this study includes the following:

- Clinics / hospitals,
- Community Halls,
- Pre-Primary Schools,
- Primary Schools,
- Secondary Schools,
- Libraries,
- Worship Sites,
- Taxi Ranks / Bus Stops, and
- Public / Private Open Space

7.4 THE INTERVENTIONS / PROPOSALS PLAN

The Densification Interventions / Proposals made for each respective Planning Unit, reflect the density grading categories shown on the spatial plan. The density grading categories consists of the following densification zones:

- No Densification,
- Less than 10 dwelling units per hectare,
- 10 to 20 dwelling units per hectare,
- 20 to 30 dwelling units per hectare,
- 30 to 40 dwelling units per hectare, and
- 40 and more dwelling units per hectare.

Within the context of the above, the various planning areas and their plan sets and text follow from Section 7.4.1 – 7.4.14.