

## 4.0 DEVELOPMENT PLAN PROPOSALS

In order to guide planning proposals for future physical development of the study area, the following basic (urban) structuring concepts and planning informants were incorporated:

- Urban Development Structuring Elements
- Urban Development Enabling Elements

### 4.1 URBAN DEVELOPMENT STRUCTURING ELEMENTS

The following are noted as basic concepts underlying the aim of achieving the re-orientation over time of the functioning of the urban areas of Mdantsane/Potsdam in line with the key principles of integration, urban consolidation and the achievement of greater levels of sustainability:

#### 4.1.1 IDENTIFICATION OF POSSIBLE URBAN NODES:

(refer to Plans 3 to 6)

Areas termed nodes are identified as places of good accessibility, normally situated at the intersection of major transport routes or transport modal interchanges.

Given its relative prominence and ease of access, a node can, therefore, allow for various, more intensive land use activities to be established around this point of concentrated movement. Should this occur, such nodes could become key areas in achieving the integration and consolidation of the urban fabric.

#### Within the study area, the following potential Nodes were identified:

##### • Higher Order Nodes

- The Highway (Mdantsane Town Centre) node;
- The Mount Ruth Station Area node;

- In addition, the higher order node proposed in the MELD study at Arnoldton, some 2 kilometres east of the study area is accepted as forming a potentially important part of the functional area of influence of Mdantsane.

##### • Lower Order Nodes

- The Potsdam node located at Potsdam East/Ikhwezi, at the intersection of the R102 and the Potsdam South access road;
- The Golden Highway node, located some 500 metres south of the Fort Jackson station, at the intersection of Qumza and Golden Highways;
- The Zone 9 node, located at the intersection of Billie Road and Qumza Highway; and
- The Mdantsane East node, located at the eastern entrance to Mdantsane and including Mtsotso Station and the area which formerly housed the Township Manager's offices.

Criteria that were used to identify potential nodes included accessibility, existing commercial activity, traffic concentration, and availability of land.

In this regard, Highway centre is centrally located in relation to a wider urban settlement. The main taxi rank serving the study area, which is located within the town centre area, makes it the focal point of the road commuter system.

The Mount Ruth station in particular, because of its location on the ridge dividing the Mdantsane/Potsdam area from the Farm 303 and Newlands peri-urban settlements, provides opportunities for commercial and higher density development.

Both the abovementioned nodes are identified and described in detail in the MELD report, currently being finalised by the Consultant Team.

All of the remaining nodes identified are situated on the main road and rail access points to the area. The mixed industrial, commercial and transportation activity at the Golden Highway/Fort Jackson and Mdantsane East/Mtsotso nodes, respectively at the Western and Eastern entrances to the study area, makes these two areas potentially suitable for further concentrated development.

#### 4.1.2 IDENTIFICATION OF POTENTIAL HIGHER DENSITY AND MIXED LAND USE AREAS:

(refer to Plans 3 to 6)

As previously noted, the Mdantsane and Potsdam areas are characterised by a specific combination of a relatively low density of development (i.e. an expansive urban environment) and a relatively high level of services infrastructure with a predominantly low income resident population. This situation is a major factor in many problems confronting both the residents of the area and the administering authority (the East London TLC).

The primary consequence is that the opportunity costs of living in Mdantsane are relatively high for people earning relatively low incomes because the costs of providing and maintaining services (including transport services) to such a sprawling, suburban environment are relatively high. In short, the sustainability of an urban area of this nature is poor.

Remedial action in such an instance is extremely difficult and made more so because of the historical development patterns of the past, where people were accustomed to a situation where the state made development decisions and implemented them, often carrying and subsidising (for political reasons) the ongoing costs of such actions. The paradox of the present situation is that, whilst residents recognise the shortcomings of the environment they live in, solutions which attempt to address these shortcomings by re-structuring the spatial development pattern (by, for example, increasing development densities in strategic localities) are sometimes resisted. Such resistance is understandable when the prior experience of most residents has been that the "hidden costs" of maintaining Mdantsane have been borne by the state and the *apparent* solution to the problems being experienced is that these costs and additional costs to be incurred in addressing the problems should also be borne by the state. As noted in Appendix 1, however, this is counter to current Government policy.

It is, therefore, both desirable and important to the future functioning of Mdantsane and Potsdam that areas where an increase in density of residential land use and a greater mix of land uses could be supported and, indeed, encouraged are identified. In this regard, a number of areas are noted:

#### • Mdantsane Central Special Development Area

This is an area which has also been identified in the MELD exercise and which appears to offer the highest potential in the medium term (0 – 10 years) for a degree of "transformation" or re-development with increasing densities and a greater mix of diversified land uses.

The reason for the designation of this area as a Special Development Area hinges on the fact that it falls between the two identified Higher Order Development Nodes of Highway and Mount Ruth Station and is bounded by District Distributor roads (Billie Road to the west and Toyana Road to the east). Also notable is the Lower Order Node identified at the Zone 9 sub-centre site located at the T intersection of Billie Road and Qumza Highway.

The existing activity in the area and the prospect that a greater intensity of land uses could be developed in the general area over time through the implementation of the MELD initiative suggests that this area has the potential to respond in a "market-led" manner.

For the above to happen, however, it is likely that the TLC would need to institute enabling policies to encourage both the diversification of land uses in the area and the formalisation of an increase in residential density. Example of such policies could range from compiling a formal Council Policy document or "Structure Plan" for the area setting out the permitted/supported land use options to setting in place a policy to provide rates rebates for owners who formalise second dwellings or who subdivide their sites (where this is possible).

Finally, *and critically*, it is likely that an exercise to reform land tenure and provide land owners with freehold title would become of great importance to support development initiatives in the area. This is critical because development in the area is likely to rely on individual land owners responding in a rational, market-led manner to peripheral initiatives.

In such a scenario, developers and land owners are more likely to respond positively when they own or have the prospect of owning land which is a securable asset against which a realistic collateral value could be assigned by financial institutions who would be more confident of trading in a situation where the immovable property is held per freehold title in terms of the Deeds Registries Act (Act 47 of 1937).

For the above reason, a Key Project identified is a PILOT PROJECT to undertake formal township establishment in a component area of the Mdantsane Central Special Development Area such as, possibly, Zone 4. Legislation to be used in such a procedure could be either the Less Formal Township Establishment Act (Act 113 of 1991) or the Development Facilitation Act (Act 67 of 1995). (see below).

- **Existing Zonal Sub-Centres**

(refer to Table 2.12 in Appendix 3)

As noted in Appendices 1 and 3, the original layout design of Mdantsane incorporated the concept of neighbourhood units or cells. In the original conception, each inward looking neighbourhood cell was to be served by a focal sub-centre accommodating business/commercial sites and administration uses. This was in keeping with the overall deterministic approach adopted in the development of Mdantsane. At present, some 20 of these business/mixed land use sub-centres exist in various stages of development.

However, for reasons already discussed, the lack of adequate economic thresholds and/or state investment to artificially boost these thresholds, has led to many designated business sites remain undeveloped. Some of these sites in the sub-centres identified might be suited to different land uses and, in cases, for the purposes of developing higher density residential pockets.

In every instance, however, it is desirable that steps be taken over time to transform the land market such as it is in Mdantsane and Potsdam to one where the economic factors of supply and demand of land with related price mechanisms will ensure transformation of low density residential use to higher density residential or other land use activities deemed economically viable when such a demand arises. The means of supporting this process are discussed further in section 4.2 below.

- **Other Areas**

In general, it is held that the increase in residential densities in any area within the formally developed areas of Mdantsane and Potsdam in response to positive factors such as access to transportation modes or places of work or facilities such as schools should be supported.

It is most likely that specific areas within Mdantsane and possibly Potsdam would, over time, appear to be more attractive for residential purposes and therefore could command a higher land bid value for owners and potential occupiers. Such areas would most obviously include the Buffer Strip Townships (particularly in areas close to existing railway stations) and areas more closely located to transport routes (e.g. areas along Qumza and Golden Highways and areas near to existing or future entrance points to the study area).

As noted above, it is held that the Council should consider adopting an enabling policy to support the development of formal second dwelling units and, where possible, the subdivision of existing residential sites to facilitate the creation of a demand-led land market in Mdantsane and Potsdam.

#### **4.1.3 URBAN CONSOLIDATION AND THE IDENTIFICATION OF AN URBAN EDGE**

(refer to Plans 3 to 6)

The phenomenon of informal settlement formation in the study area has been previously noted. Whilst in the early days of Mdantsane, strict controls were maintained by the repressive Ciskei regime on the formation of informal settlements within the urban area, it was noted that the net result was a high level of overcrowding within formal dwellings/sites.

During the early 1990's, however, such controls were not maintained and, as was experienced elsewhere within the TLC area, informal settlement formation took place rapidly and at some scale in Mdantsane (e.g. in the Buffer Strip and within the urban fabric on vacant sites or on the fringes of developed areas).

To a degree, this trend has slowed down in recent years. It is nonetheless notable that informal settlement formation continues to occur, particularly in the undeveloped western sector of Potsdam and on areas believed (by occupants) to be in line for imminent formal development (e.g. Potsdam East Neighbourhood 1).

The consequences of this trend for managed urban development and, especially, for the adherence by the TLC to the legal requirements set out in the General Principles of the Development Facilitation Act are clear: the perpetuation of a sprawling, space extensive and costly form of urban development.

In order to counter this trend, two interlinked Policy Decisions would need to be taken by the TLC:

1. The acceptance of the concept and the definition of an **Urban Edge**. A proposed positioning of such an Urban Edge is depicted on Plans 3 – 6 and is based on an assessment of the current and short - medium term (0-10 years) serviceability of the western sector of the Potsdam area.
2. In tandem with the acceptance of a defined Urban Edge, the Council must subscribe to a policy of **Urban Consolidation**. The substance of this policy would be to direct development in strategic locations eastward *towards central East London* in the short – medium term (0 – 10 years).

Such a process has, in fact, already begun with the Council's decision to initiate development in the Reeston Development Area, some 2-3 kms east of Mdantsane. Additional impetus for development in this area is lent by proposals contained in the MELD report for the development of the Arnoldton area located due north of Reeston, across the Mdantsane Access Road as a Higher Order Development Node, as discussed in section 4.1.1 above. The Reeston development area and the Arnoldton Higher Order Node are depicted on Plans 3 – 6.

The Key Features of the above policies would include:

- The limitation of development in the western sector of Potsdam in the medium term (i.e. 10 years);
- The support of initiatives to consolidate the urban fabric of Mdantsane and Potsdam by the development of infill areas such as Zone CC, Unit V and Potsdam East/Ikhwezi, where services could be extended in the short – medium term, and the upgrade of existing viable informal settlement areas such as the Buffer Strip townships and other identified areas within and on the fringe of Mdantsane; and
- Simultaneously, the initiation of development in key localities such as at Reeston and the Higher and Lower Order Development Nodes.
- It is estimated that the enactment of the above scenario over a 10 year period would enable the development of some 25 000 formal (or formalised) residential units in this time. This would go some way towards meeting the projected 10 year need for the development of some 30 000 residential dwelling units in the study area and environs.

The implications of such a Policy decision would include:

- A responsibility would be placed on Council to drive development aggressively in the areas identified as being desirable to achieve integration and urban consolidation, including the identified infill areas and the Development Nodes. Specifically, the development of residential sites and housing units in these areas would be essential to divert the pressure for informal settlement formation presently being experienced in the western sector of Potsdam and the onus would be on the Council to investigate innovative ways to fund and implement such projects;
- Related to this would be the responsibility placed on the local authority to police and manage informal settlement formation in areas which are not identified for formal development in the medium term (i.e. areas which fall outside the defined Urban Edge). The success of this action is likely to depend on the success of the development initiatives discussed above,

## 4.2 URBAN DEVELOPMENT ENABLING ELEMENTS

Whilst the adoption of a structural framework to guide physical development in the study area is of critical importance, of equal importance is the *development enabling environment* created by a complex mix of factors. Such factors include:

- Factors related to land ownership and specific forms of tenure, as well as the administration of land transactions;
- Factors relating to the quality and responsiveness of land administration carried out by the responsible authorities, particularly, the East London TLC; and
- The existence of formal enabling policies to guide and facilitate development and desired development outcomes.

### 4.2.1 LAND TENURE REFORM AND THE LAND MARKET

As set out in Appendix 6, the predominant form of land tenure in the study area is that of Deed of Grant held over so-called ownership units designated in terms of Townships Proclamation R293 of 1962, as amended.

The specific nature of this form of tenure held over sites has a number of limitations relating to the fact that a site held under Deed of Grant is legally not a securable entity. To overcome this obstacle, the former Government of the Ciskei issued a proclamation in terms of R293 legislation which gave site owners "blanket" permission to approach and secure loan funding from financial institutions. In the absence of such official permission, however, any mortgage bond held over a property would be valueless and it is presently not clear whether the legal status of the proclamation issued by the former Ciskei administration still holds good.

The consequences of this would appear to have made it even more difficult for land owners to raise loan funding as institutions have been reluctant to participate in the property market in Mdantsane, amongst other reasons because the form of ownership is not full freehold title.

This fact tends to have a negative impact on the normal functioning of the local land market, with prices of properties held under Deed of Grant being artificially limited by the fact that mortgage finance would be relatively difficult to raise. Consequently, properties are likely not often seen as having an asset value but merely a use value. Not only does this depress the property market in an area such as Mdantsane but it also results in the land owner having an asset which does not significantly accrue value or contribute much to personal wealth formation.

Whilst there are a number of other legal and technical factors relating to the inferiority of the Deed of Grant versus freehold title, these are beyond the scope of this study and would be better defined in a legal opinion. Nevertheless, it is held that the instigation of a normal functioning land market with trade in immovable properties held per freehold title in terms of the Deeds Registries Act (Act 47 of 1937) would greatly contribute to the improved sustainability and functioning of the study area as an increasingly multifaceted, dynamic urban area.

For this reason, it is proposed that a PILOT PROJECT to upgrade land tenure by undertaking a community interactive township establishment and tenure upgrade programme be initiated within the Mdantsane Central Special Development Area as discussed above in section 4.1.2.

#### 4.2.2 URBAN ADMINISTRATION

For development to occur in a more positive and reactive manner (as opposed to being state-led), it is critical that the quality and nature of the administration of the Mdantsane and Potsdam areas become more responsive and flexible. It is, therefore, considered of great importance that the TLC achieve clarity on the legislation to be employed by it in administering the study area, as well as the procedures involved in this. Accordingly, to ease the tasks involved in administration of Mdantsane, it is proposed that the EL TLC approach the Eastern Cape Provincial MEC for Housing & Local Government to:

1. Issue a Proclamation in terms of Section 10 of the Local Government Transition Act, No. 209 of 1993, as amended to **either** amend Proclamation 79 of 1994 which established the EL TLC, in appropriate respects, to give preference to those provisions of the Cape Municipal Ordinance (20 of 1974) which conflict with equivalent provisions of Proclamation R29 of 1962 (as amended); **or** amend or repeal those provisions of Proclamation R293 which are in conflict with equivalent provisions of the Cape Municipal Ordinance (20 of 1974).
2. Furthermore, it is recommended that the same or a separate Proclamation made under Section 10 of the Local Government Transition Act be framed to provide that the area of Potsdam will be administered in terms of the Cape Municipal Ordinance (20 of 1974), which would apply to the exclusion of any other law dealing with local government matters in the area (by the repeal or amendment of such law); **and** provide that the area of application of the Cape Municipal Ordinance (20 of 1974) is amended to include the(se) area(s) of Potsdam.

With regard to the easing of land administration tasks in the short-medium term, the following is proposed:

1. As previously discussed, initiate a Pilot Project which would test the feasibility of undertaking "proper" township establishment and associated land tenure upgrading for all the R293 components of its jurisdiction; and
2. Set in place, or reconstruct from available records, a record of all surveyed sites in Mdantsane and their registered owners:- such records could be sourced from the Mdantsane Town Manager's office (legally now part of the TLC's administration) and the King William's Town Deeds Registry.

**4.2.3 FOCUSED URBAN DEVELOPMENT POLICIES**

In the final instance, it will be of great importance for the future development of Mdantsane and Potsdam for the TLC to establish flexible and easily understood land development policies in these areas. The following applies:

- As noted above, the TLC would need to investigate in detail the possible means to facilitate and encourage desirable development outcomes such as an increase in residential densities in existing areas of Mdantsane and Potsdam. This is particularly so in areas where this would contribute to the better functioning of the urban environment by improving the cost efficiency of rendering services and by increasing the number of residents with relatively better access to transportation and other facilities, goods and services available in strategic localities such as Highway and the other development nodes.
- It is also likely to be important for the TLC to set in place policies which recognise the need for a diversification of land uses in Mdantsane and Potsdam and to publicise these to inform residents of the concepts of land use amendment applications. This is of importance specifically because the legacy of a rigid, prescriptive township layout developed and administered in terms of equally prescriptive legislation (R293) has been a constrained urban environment. That is, an urban environment where prospective developers and entrepreneurs are directed to pre-planned business and industrial sites which are often unviable because of their locality, instead of a situation where such possible investors might identify a site based on its favourable location and apply for permission to amend its land use, as would occur in the normal cycle of development in a dynamic urban area.
- Common to the above approaches would be a recognition of the need to amend or override the prescriptions of Proclamation R293 and to institute over time a tenure reform programme which would upgrade title from the restrictive Deed of Grant format prevailing in terms of R293 to freehold title.

The above issues should be dealt with over a 5-year implementation period, based on a **community interactive project** to formulate a Development Friendly set of policies, specifically geared to address critical issues in Mdantsane and Potsdam. Such policies should address the issues noted above, including, critically, the means to encourage densification in strategic localities and the means to develop over time a more normal functioning land market.

**4.3 SECTORAL DEVELOPMENT PROPOSALS**

Overall proposals to guide future spatial development in the study area are framed below in terms of different sectors, as follows:

- Business/Local Economic Development
- Industrial Development
- Recreation/Active Open Space
- Social Infrastructure
- Housing
- Engineering (Services) Infrastructure
- Transportation
- Urban Land Administration

**4.3.1 BUSINESS / LOCAL ECONOMIC DEVELOPMENT.**

(refer to Plan No. 3)

In the short – medium term, local economic development focusing on the service and retail sectors should be directed towards the various nodes identified, i.e.:

- Highway
- Mount Ruth
- Zone 9 Centre
- Mdantsane East
- Golden Highway
- Potsdam

Local Economic development focusing on small scale service industry and manufacturing to be accommodated in business hives located at nodal points. An important criterion in the identification of these hives in accessibility.

Informal Business in the form of hawking to be accommodated through the provision of appropriate facilities to improve the conditions for trading.

These facilities should be provided at points of existing concentrated activity, i.e.:

- CMH Hospital
- Within identified nodes
- Other points of modal interchange:
  - taxi ranks
  - stations

#### 4.3.1.1 KEY PROJECTS

As identified in the MELD project report, it is felt that the key lead projects for implementation in the short term (in order of priority) at this stage of development in the Highway node are:

1. Detailed Land Ownership Investigation to determine current status of land holdings in the node and to identify means of resolving anomalies and blockages to development arising from land ownership complexities.
2. The organisation and development of a Small Trader Market Place, as described in the MELD report.

With regard to the Mount Ruth node, the following key lead projects are identified for initiation in the short term:

1. As noted in the MELD report, the planning and development of Transport Interchanges and associated public spaces (Market/Hawkers' Facilities) to the north and south of Mount Ruth Station.
2. In co-operation with the Department of Agriculture and Land Affairs, initiate the establishment of an Urban Agriculture Support Extension Office within the Mount Ruth node. This office should be accessible to current and prospective subsistence and commercial small scale farmers operating within Mdantsane and Potsdam as well as the Eluxolweni/Farm 303 and Newlands areas north of Mount Ruth.

#### 4.3.2 INDUSTRIAL DEVELOPMENT

(refer to Plan No. 3)

Areas for future industrial development or extension appear to be sufficient to accommodate maximum potential for growth within the next 5-year period. These include:

Fort Jackson Extension 2

Portions of Mdantsane East Industrial township

It should be noted that land reservation for the possible future extension of the Fort Jackson industrial complex is shown on Plan No. 3 as falling into a 5 – 10 year development period. This would obviously depend on the success of retaining current levels of development in the Fort Jackson area and drawing in additional industries over the coming 5-year period. The agency responsible for this area presently remains the Eastern Cape Development Agency (ECDA).

Finally, in the assessment of future demand for industrial land in the study, the following aspects may have an impact:

- The availability of industrial land in the West Bank, in close proximity to the city and existing major industries.
- The absence of incentives that were initially used to attract industries to the Study Area (Fort Jackson).

#### 4.3.2.1 KEY PROJECTS

The following key lead projects are identified for the promotion of industrial development in the study area:

1. The formulation of an industrial development and marketing strategy, in co-operation with the Eastern Cape Development Agency (ECDA), focusing on prospective developments in Fort Jackson and Mdantsane East Industrial townships.
2. Investigate the feasibility of establishing a Light Industrial Zone within the Highway node. The success of such a venture is likely to depend on the outcome of the Land Ownership Investigation noted above as being required to facilitate planning and development in Highway.

**4.3.3 HOUSING DEVELOPMENT**

(refer to Plan 4)

As noted above and in Appendix 3, the issues surrounding the development of new or upgraded housing stock at scale to overcome the present estimated backlog of 16 500 units in the study area are numerous and complex.

It was noted that many of the disbenefits arising from residence in Mdantsane and Potsdam are related to the mode and form of spatial development adopted in the past. However, it has also been noted that the present Government housing policies implicitly encourage the perpetuation of this form of sprawling development based on a one household one plot conception. Moreover, recent experience has been that insufficient funding is in place to enable the Government (at National, Provincial and local level) to provide the means to implement its policies at the scale required to overcome the backlog in an area such as Mdantsane/Potsdam.

It is therefore contended that an integrated Housing Delivery programme must be formulated by the East London TLC which addresses the realities of the present situation in its area of jurisdiction and identifies Ways and Means to proceed with a strategy that would be aimed at developing the necessary housing stock, including rental housing, in appropriate forms at localities identified as being suited to the achievement of the overall strategic urban development goals of integration and consolidation of the urban fabric.

In the case of the Mdantsane and Potsdam areas, these strategic localities would include areas already occupied (e.g. the Buffer Strip townships and certain informal settlement areas) as well as Greenfields development areas. Of particular note is that **a co-ordinated housing development programme** would be critical to the success of delivery at scale.

As indicated in Appendix 3, of the approximately 11 000 informal dwellings identified in the study area, only some 6 900 of these could be accommodated through the implementation of upgrade and township formalisation projects in individual informal areas. Therefore, to facilitate the upgrade and formalisation of the existing informal settlement areas, an immediate need exists for approximately 4 000 to 4 500 housing units in Greenfield areas. Additionally, another approximately 5 000 units would be required to address the current backlog in full, with an estimated additional need for some 13 000 dwelling units being generated from within the study area and environs over the next 10 year period.

Strategically, it is felt that to deal with the enormous tasks involved in addressing this situation, housing development may be separated into the following categories:

- Densification Projects
- Infill and Upgrading Projects
- New Residential Developments

All the above 3 categories of projects are inter-related but, ultimately, the success of the overall housing programme will depend on the successful development of strategically located Greenfields housing projects to absorb residents who might be displaced by the technical requirements of the upgrading and formalisation of informal settlement areas.

The following applies:

**4.3.3.1 DENSIFICATION PROJECTS:**

As is evident from the analysis of current housing in the study area, current provision of housing mainly consists of lower density, single residential developments, predominantly based on a single household single plot spatial model.

In urban development terms, this form of residential development for a community with a very low affordability profile is likely to prove unsustainable. Consequently, higher density urban forms of accommodation for such communities are commonly sought. However, for a number of complex and interrelated social, historical and cultural reasons, alternative housing provision in the form of high rise flat buildings or multi-storey residential developments have, to date, not been seen as a popular or viable option for the communities residing in the study area.

Despite this, it is recommended that higher density residential developments in centrally located parts of the study area be encouraged by means noted in section 4.2 above, viz. By instituting policies favourable to the development of multiple formal dwellings and/or subdivisions in the study area (or, at least, in areas such as the identified Mdantsane Central Special Development Area).

In a number of areas, this densification trend is already evident (i.e. the presence of backyard shacks and "flat" developments). It is, therefore, not expected that considerable changes will take place in the present population of such areas. However, with the introduction of enabling policies and the

normalisation over time of the land market in Mdantsane and Potsdam, it is hoped that a more rational response to the spatial realities of the study area would manifest itself, in due course.

In this regard, then, the Key Projects would include:

1. The Pilot Project discussed in section 4.2 above, which would attempt to initiate a process of formal township establishment and land tenure reform in an area within the Mdantsane Central Special Development Area.
2. The development of Pilot Higher Density Housing Projects within the Major Development Nodes of Highway and Mount Ruth, as indicated in the MELD report.

#### **4.3.3.2 INFILL AND UPGRADING PROJECTS:**

(refer to Plan 4 and Plan App. 3.3 in Appendix 3)

Given the fact that there are some 11 000 identified informal dwellings located within some 113 identifiable informal and less formal settlement areas within the study area, a process of targeted upgrading of suitably located settlements is vital to the improvement of the urban environment of Mdantsane and Potsdam.

Following an evaluation of the potential for development of each of these settlements, proposals and recommendations regarding the future of these areas were made. Reference in this regard is made to Table 2.4 in Appendix 3 (page 8) and it is to be noted that informal and less formal areas are proposed for upgrading and formalisation through in-situ planning wherever possible. Apart from informal and less formal settlement occurring in areas already planned or identified for future development (see below), there are some 80 individual settlement areas where upgrading and formalisation actions could be contemplated, as set out in Table 2.4 referred to above.

In this regard, the TLC's Department of Development Planning is in possession of proto-typical Layouts for most of these settlement areas, which could serve as a basis upon which to initiate individual projects.

Because of the sensitive nature of upgrading projects, a sustained interactive planning process will have to be followed to engage the communities' support.

Of central importance to the successful implementation of such an upgrading process is the fact that, in order to establish settlements of acceptable standard, considering the parameters of density and serviceability in regard to factors such as topographical constraints, locations relative to existing services networks and site ownership (where vacant sites have been occupied), approximately 4 000 to 4 500 informal units in these settlements are likely to have to be relocated.

As repeatedly noted, this means that it is of critical importance to schedule the programme of in-situ upgrade of informal settlements to coincide with new residential developments.

#### **4.3.3.3 HOUSING DEVELOPMENT AREAS**

In addition to the approximately 80 smaller settlement areas within Mdantsane and on the fringes of formal areas in Potsdam, the following infill (Greenfields) and informal settlement areas are identified for upgrade and/or formal development actions:

##### **A.1 Buffer Strip**

Due to rapid and poorly co-ordinated detailed planning in the past, certain planning inconsistencies have occurred. After re-evaluation of the current development status within the Buffer Strip, selective re-planning of certain key areas will have to take place, so as to ensure improved access to railway stations, adequate provision for bulk services and better traffic circulation.

Some of these proposals are discussed in more detail under the transport section below.

There is a total of approximately 2 500 informal units situated in the various parts of the Buffer Strip. These units are mostly situated on demarcated sites. There are, however, a number of units situated within servitude areas and on the fringes of the planned settlements.

Through an exercise of corrective planning in specific problem areas, an estimated total of approximately 500 units will need to be relocated. Minimal disruption of residents will be an important criterion in this planning exercise.

As with the in-situ planning of informal settlements discussed in the previous section, the displacement of occupants from the Buffer Strip will require adequate and timeous provision of residential sites and structures in new residential extensions.

### **A.2 Mdantsane East Extension 2**

This area has been planned and surveyed and contains some 191 residential sites (300m<sup>2</sup> average size). To date, no informal settlement has taken place on this area, which may be related to its proximity to a site where, previously, night-soil had been dumped in the early development phases of Mdantsane.

Reportedly, Newhco has approached the TLC for the development rights to this area; this initiative should be supported.

### **A.3 Unit V**

This informal settlement is made up of approximately 174 structures and is situated on a portion of land within the south-eastern sector of the proposed Unit V residential area, currently being planned. The Unit V development area stretches between the western fringe of Unit M, Mdantsane and the already developed area of Potsdam South Neighbourhood 1 in the west.

It is envisaged that, once finally planned and approved, this area will consist of a total number of some 2 300 residential sites. In addition to the existing informal units to be accommodated, a total number of 2 126 residential sites could, therefore, be made available through this development.

Given its strategic locality between the urban fabric of Mdantsane and the "satellite" area of Potsdam South Neighbourhood 1, the development of this area is considered a priority and accords with the principles of urban integration and consolidation.

On the basis of previous work done in this area, it would appear that the servicing of the township with water and sanitation infrastructure is feasible.

### **A.4 Zone CC**

An informal settlement of some 122 structures (forming part of an extended informal settlement community known as *Eric Ntonga*) is situated within the

north-western half of the area to be developed as Zone CC Residential Extension.

The western portion of Zone CC is scheduled to form the first phase of development, wherein some 427 residential sites would be made available. This phase of the project is already in the process of being implemented, having been funded through a Project-Linked Capital Subsidy Application.

In addition to the 122 informal structure to be accommodated, it is expected that a total number of 2 076 residential sites will be made available once the full extent of Zone CC is developed.

Existing infrastructure networks are located in close proximity to the projected second phase development of this area. Availability of spare capacity to take the full development of Zone CC would need to be established via a dedicated engineering feasibility study but appears promising.

### **A.5 Valley View**

Valley View has, to date, been regarded by some members of the Mdantsane community as one of the priority areas for future residential extension.

The existing informal settlement numbering approximately 122 structures is situated on the fringes of the only operating refuse disposal site in Mdantsane. Due to the required rehabilitation/settling period for such a refuse dump site before it can be developed for beneficial use, a large part of the Valley View settlement area cannot be developed in the near future.

It will therefore only be possible to develop the southern portion of the Valley View area, not taken up by the disposal site, at this stage.

It is expected that a total number of 300 residential sites could be made available in such a scenario, should it prove feasible to proceed with this development. It would, however, be necessary to engage in a more detailed feasibility study in this regard.

### **A.6 Potsdam Village and Extension (Areas 1 and 2)**

The less formal settlement of these two areas took place in the early 1980's in an organised manner (as part of the government of the day's policy of consolidation of the "Ciskei Homeland").

This area falls within an environmentally sensitive area abutting the Buffalo River and serious concerns must exist regarding the pollution threat to the river and the downstream Bridledrift Dam emanating from these settlements.

However, given the "forced" origin of these areas and the length of residency in the local area, as well as the fact that capital investment in the form of access roads, water infrastructure, schools and other community facilities has been made, formalisation and upgrading with minimal possible disruption is proposed as being appropriate here.

It is expected that all the estimated 2 230 existing structures could be accommodated within the area. The formalisation and upgrading of these areas are, therefore, not dependent on the development of additional residential extensions and can be initiated as soon as possible.

A detailed engineering feasibility study is, however, deemed necessary to determine the optimum method for developing an appropriate sanitation system for these areas.

#### **A.7 Potsdam East Neighbourhood 1**

---

This is an area located north-west of Fort Jackson Industrial township, to the north of the R102 Trunk Road. The site was previously identified for residential and mixed land use township development in terms of the Potsdam Master Plan (1986) and planned and surveyed in the late 1980's.

Presently, an informal settlement of at least 400 structures is situated on this area and it appears as if settlement in this area has taken place broadly according to the Layout Plan. If this is so, it is anticipated that, with minimal corrective planning to provide appropriate access to sites abutting the R102 Regional Trunk Road, the development of this area could make available some 482 residential sites additional to the ±400 occupied by informal dwellers.

In terms of existing infrastructure in the area and available capacities, servicing of this area appears feasible. This, however, remains subject to a more detailed and specific engineering feasibility study.

#### **A.8 Ikhwezi Phases I and II**

---

This is an extended informal settlement area located to the east and west of the Potsdam South Access Road.

As this is an unplanned area (but suited to formal development in terms of terrain constraints) it is recommended that an in-situ planning exercise be undertaken to formalise this settlement before the necessary upgrading takes place.

However, given the restrictions of existing services networks and topography, the full area should be developed in the medium term, with Phase I, accommodating some 400 sites, being located east of the Potsdam South Access Road and being developable in the short term (0 – 5 year period). In addition, it is estimated that an additional 450 residential units can be accommodated within the developable space available in Phase II of this development area.

#### **A.9 Potsdam South Extension 1**

---

This is an area located due north and adjacent to the already developed Potsdam South township. If it is deemed to be suitable and serviceable by the relevant TLC Service Branches, it should be possible to develop some 140 additional low income residential even there, in the short term.

#### **A.10 Potsdam North**

---

This is another area where informal settlement has occurred. The area is situated along the ridgeline, due south of the R102 trunk Road. The settlement is more or less directly opposite the Border Technikon premises.

In view of its location outside the reach and scope of existing services networks, it is anticipated that this area could become developable in a 5 – 10 year period.

Development of the area would result in some 1 000 formal sites being made available in this area.

#### **A.11 Medium and Higher Income Areas (M1 and M2)**

---

Two areas to the south of Fort Jackson industrial area located on either side of the newly developed Cemetery have been earmarked as being suitable for future medium income residential development.

It is envisaged that the development of the two areas designated Areas M1 and M2 and measuring some 44,4 hectares in total, will make available a total number of approximately 443 erven.

Both these areas are located so as to be serviceable by existing bulk infrastructure networks. Development of these areas should, however, be preceded by a detailed engineering feasibility study.

Once it has secured the rights to the underlying properties, the TLC may wish to call for proposals from private developers active in the middle income sector of the housing market.

In addition to these two area, it is also envisaged that the improvement of housing stock within Mdantsane might take place as a natural urban upgrading process, particularly if any improvement in the socio-economic status of the residents occurs.

#### **A.12 Reeston Development Area**

As discussed in Section 4.2 above, the area known as the Reeston Development Area is seen to fall within the sphere of influence of Mdantsane and Potsdam. As such, this area, now recognised by the TLC as representing an important area for development in order to begin to achieve the consolidation and integration of the Mdantsane – East London Development Corridor area, is also seen as being of great significance in meeting the need for additional residential development to accommodate residents emanating from the Mdantsane and Potsdam areas.

This area is presently under development. The Phase I development underway is for some 2 000 residential sites and this will accommodate existing communities presently residing in the Reeston area.

Further Phases of this development will result in the availability of some 3 000 additional residential sites in this area.

The development of bulk and reticulated services networks for this area has been initiated.

#### **4.3.3.4 PROGRAMMING OF HOUSING DEVELOPMENT AREAS**

The programming of development of the areas discussed above is complicated by the fact that funding and project approval processes are time consuming and, at present, operating within constraints imposed by lack of funds.

Nevertheless, the following is proposed:

##### **A.1 Priority Development Areas**

The following Greenfields/Infill areas are prioritised for development in the short term (0 – 5 years):

- Reeston Development Area (approx. 5 000 sites)
- Zone CC Development Area (approx. 2 100 sites)
- Unit V Development Area (approx. 2 300 sites)
- Potsdam South Extension 1 (approx. 140 sites)
- Mdantsane East Extension 2 (approx. 191 sites)

In addition, the feasibility of developing some 300 sites in the southern extent of the previously planned Valley View township should be investigated.

The following Informal Settlement/Upgrade areas are prioritised for development in the short term (0 – 5 years):

- The Buffer Strip townships (approx. 2 000 formalised sites)
- Potsdam Village [Areas 1 and 2] (approx. 2 230 sites)
- Potsdam East Neighbourhood 1 (approx 880 sites)
- Ikhwezi [East of Potsdam South Access Road] (approx. 400 sites)

#### **4.3.3.5 RESIDENTIAL DEVELOPMENT: POSSIBLE IMPLEMENTATION STRATEGIES**

Elsewhere in this report, reference has been made to the fact that the official mechanisms (policies and funding channels) for housing development are under severe pressure, particularly in the Eastern Cape Province.

Whilst the situation with regard to funding appears to be dynamic and may change over time, it is nonetheless true that the technical processes involved in piloting a prospective housing project through the official application approval and funding approval procedures are time-consuming.

What this means, specifically in the case of housing development in Mdantsane and Potsdam, is that the estimated housing backlog of some 16 500 units (including those existing dwellings to be formalised in informal or less formal areas) will be extremely difficult to eradicate in a short period of time. In the absence of other mechanisms to settle residents in areas which are strategically well-located for development and meet the criteria of contributing to the goals of integration and consolidation of the East London Metropolitan area, the present situation of informal settlement creation and inertia in housing development prevails.

To address this situation, it is proposed that the TLC embark on the development of specific housing development areas on a programmed basis, by adopting a phased implementation approach. Specifically, this will entail:

#### **A.1 Interim or "Start-Up" Development Phase**

1. The identification of specific development areas and obtaining the approval of Council for the development of these areas;
2. The formulation and submission of applications for funding in terms of the applicable Housing Subsidy Scheme (e.g. Project-Linked, Credit-Linked etc.);
3. In the interim, proceed with the planning and surveying (where necessary) of such areas;
4. The submission of bulk infrastructure funding proposals to relevant bodies (e.g. Consolidated Municipal Infrastructure Programme administered by the Department of Housing & Local Government);
5. The allocation of sites to qualifying beneficiaries;
6. Carry out the steps necessary to ensure speedy registration of title is possible, once funding mechanisms are in place to permit this;
7. As a final step in the interim development phase, complete development of an initial service infrastructure network to basic RDP standards, utilising gearing funding to be sourced either from Council's Capital Budgets or from outside agencies (e.g. DBSA).

#### **A.2 Consolidation Phase**

1. Once full project funding is approved and made available through the Department of Housing & Local Government, the full implementation of housing development and services reticulation can be carried out.

Accepting that the above outlines only one possibility, it is nevertheless emphasised that a positive strategy to make residential accommodation available in appropriate locations (and in appropriate forms, including rental stock) is essential if there is to be any prospect of the East London TLC area becoming a more efficient, sustainable and productive urban environment for its residents.

Finally, with regard to the implementation of higher density housing developments, it is held to be critical that the East London TLC lobby at Provincial and National Government level for access to funding to permit such developments. In this regard, the Belgravia HAEL (Housing association of East London) initiative may serve as an example, albeit not for "the poorest of the poor".

Areas for implementation of such higher density housing solutions, as previously indicated, would include the Highway and Mount Ruth Development Nodes as well as the Arnoldton Development Node opposite the Reeston Development Area.

#### **4.3.4 SOCIAL INFRASTRUCTURE DEVELOPMENT**

Given the fact that access to social and welfare support facilities such as schools, clinics and other facilities noted on page 24 of Appendix 3 is relatively poor, the following applies:

In order to reinforce the development of Development Nodes identified in this report, it is proposed that future social/institutional facilities be provided in such areas. This proposal endorses the concept of "facility bundling" proposed in the MELD report and will help to ensure that the community would have easier access to such facilities over time.

The nodes identified for such land use development include the Zone 9 Lower Order Development Node, the Mount Ruth Higher Order Development Node, Highway and Mdantsane East.

In addition, the TLC should investigate the possibilities of densification of spatially extensive facilities such as schools so as to release land for other critical land use needs i.e. housing, additional institutions, etc.

**4.3.5 ENGINEERING SERVICES INFRASTRUCTURE**

(refer to Plan No. 5 and Appendix 4)

Proposals for this sector are set out below.

**4.3.5.1 ELECTRICITY**

To a great extent, the rendering of electricity services to the consumers of Mdantsane is subject to current programmes being implemented by Siemens Ltd, viz.:

- Emergency Repair programme;
- Upgrading of Existing Infrastructure; and
- Revenue Management programme

This work is presently underway and the success, in particular, of the revenue Management programme will facilitate the extension of new services to areas presently not falling within the existing network.

**4.3.5.2 WATER**

The present situation of water being pumped up from the Umzoniana and Nahoon Treatment Works to Mdantsane and resulting in complications as described in Appendix 4, is undesirable.

With this in mind and in the context of future development in Mdantsane and Potsdam the following factors as mentioned in the sewage report are significant.

1. The bulk water supply is from the east.
2. All water consumed in Mdantsane is pumped up from the east, besides a minimal percentage from Laing Dam.
3. Thus, extending built development further westward will serve to compound the existing problems, including expense.

With a limited expansion to the West of Mdantsane (i.e. Potsdam) of 8000 erven @ 600 l/erf/day this results in an additional demand of approximately 5 MI/day. Water is also required in the Reeston and SAB developments. The Reeston development is based on 6000 erven @ 600 l/erf/day this results in a demand of approximately 3.5 MI/day. The preliminary estimated demand for the SAB development is 4 MI/day. If however a solution could be found to the water loss situation in Mdantsane, this could meet the additional demand.

A study in the form of a dedicated report on the water supply to Mdantsane and future extensions is urgently required and is presently being undertaken by a firm of consulting engineers.

**4.3.5.3 SANITATION**

With regard to servicing future developments in Mdantsane and Potsdam, the following alternatives have been derived from comments and observations set out in Appendix 4:

**Alternative A: Proposed Potsdam Works**

Within this alternative the following two alternatives are raised:

- 1) The works is to be designed to produce effluent to special standards. The final effluent is to be discharged to the watercourse.
- 2) The works is to be designed to produce effluent to general standards. The final effluent is to be pumped to the main Mdantsane Works for discharge into the Buffalo River below the Bridle Drift Dam.

In the event of an activated sludge works being constructed (to comply with point 1) consideration must be given to the quality of the effluent to be treated. This would necessitate that "wet" industries only proceed in areas to be served by the proposed Potsdam Works with extreme caution. In this regard attention is drawn to the presence of the pipeline which runs from Da Gama Textiles, to the East of Mdantsane, to the sea discharge at Hood Point on the outskirts of East London.

**Alternative B: Proposed pumping of all sewage for treatment at:**

- 1) Expanded Mdantsane West works.
- 2) Upgraded main Mdantsane works.

It is essential that a dedicated in-depth report on the disposal of sewage for Mdantsane and the surrounding growth areas be undertaken to access the following:

- 1) The treatment of sewage generated within Mdantsane at a new treatment works at Potsdam.
- 2) The treatment of sewage generated within Mdantsane at an existing upgraded works within Mdantsane.

The treatment of sewage generated in the greater Mdantsane area (including Needs Camp & Newlands) at a new works at Potsdam or a regional works.

**4.3.5.4 SOLID WASTE**

As noted in Appendix 4, the only existing, active solid waste site serving the area is located in Zone 3. This is an unlicensed facility and should be closed and rehabilitated as soon as feasible for environmental reasons.

The closure of this facility is also desirable as it would permit the more integrated and harmonious development of the Valley View residential area which was previously planned but over portion of which the solid waste site falls.

With the imminent implementation of the TLC's Regional Solid Waste site and the institution of a managed collection system in the study area, this proposal should be carried out in the short term (0 – 5 years).

**4.3.6 TRANSPORT**

(refer to Plan No. 5 and Appendix 5)

On a metropolitan level, it is important to improve transport linkages with areas surrounding the study area. In this regard, the following is proposed:

1. In the short term (0 – 5 years) investigate the feasibility and/or desirability of an additional access linkage route to the N2 linking into Mdantsane by crossing the railway line at a point between the Buffer Strip townships of Mdantsane-East and East Extension 1. The road will link to the N2 via the Nahoon Dam on-ramp with some realignment and upgrading of minor roads on the periphery of the residential neighbourhood in Zone 1, allowing for an additional connector to Qumza Highway.
2. In the short term, conduct a feasibility study into the development of a road and low-level bridge crossing, linking Needs Camp with Mdantsane, crossing the Buffalo River south of Potsdam Village.
3. In the short – medium term, investigate the feasibility of a freeway interchange near the Mount Ruth station, as proposed in the MELD report. Such an interchange and associated access linkages into Mdantsane (along Billie Road) and the Farm 303/Newlands area would open the study area and adjacent peri-urban areas up to improved access. It would also support development initiatives in the Mount Ruth Development Node.
4. In the short term, investigate the feasibility of developing a railway halt/passenger pick-up facility to serve the Potsdam north and Potsdam East/Ikhwezi areas as well as the Border Technikon. This facility could be located due east of Potsdam East Neighbourhood 1 as indicated on Plan 5.

At a local (study area) level, as indicated in Appendix 5, a number of problems exist, these include:

- Lack of an access hierarchy
- Lack of stormwater drainage, sidewalks and bus/taxi embayments, etc.

Due to the externally related commuting nature of movement, better access to the transport nodes needs to be provided. In addition to this, the functioning of the existing transport also needs to be improved.

In this regard, the following is proposed:

1. The re-alignment of access roads to Egerton and Mount Ruth Stations to improve access to these areas.
2. The upgrading and/or development of east-west link roads to the south of the Buffer Strip to District Distributor status, to terminate at an intersection with Golden Highway to be developed directly opposite the entrance road to the Fort Jackson industrial township. This routing would skirt the Mdantsane Prison to the north (refer to Plan 5).
3. As a support to initiatives to boost inter-modal transportation use, initiate the provision of taxi and commercial/hawking facilities at the various stations.
4. To improve traffic flow and safety, investigate the feasibility and/or desirability effecting the realignment of Billie Road to form a 4-way intersection with Qumza Highway and Jiba Road
5. Associated with the proposed development of Unit V, upgrade the Potsdam East - Unit V access road from Mdantsane Zone 15.
6. As a general proposal, the upgrading/development of sidewalks throughout the study area in areas where traffic movement is significant will improve ease of circulation and traffic safety. In this regard, a Pilot Project could be initiated in the designated Mdantsane Central Special Development Area.

#### 4.3.7 ACTIVE AND PASSIVE OPEN SPACE

(refer to Plan 6)

Given the broken nature of the terrain upon which Mdantsane and Potsdam are situated, much of the study area is undevelopable because of too steep slopes and/or stream and river watercourses. This has led to a characteristic urban form of ridgeline and spur development, with most of the urban (township) areas in the lower reaches of the river and stream valley systems being oriented in a north-east/south-west direction, and separated from each other by the valleys.

##### 4.3.7.1 KEY PROJECTS: PASSIVE RECREATION - CONSERVATION

(refer to Plan 6)

1. Many of these undeveloped valleys have been utilised for cultivation purposes on an informal basis. It is felt that these sub-subsistence urban agricultural activities need to be supported and facilitated in a managed way to ensure that negative environmental consequences such as erosion and pollution of streams and the downstream Bridledrift Dam (by, for example organo-phosphate fertilizers and diverted raw sewage) are brought under control.
2. Further westward in the Potsdam area, informal settlement is occurring in areas which fall outside the identified Urban Edge. This settlement also needs to be brought under control and dealt with in a managed way. These areas, it is proposed, should, in the medium term (0 – 10 years) be utilised for managed dryland agriculture on spur tops and, where feasible, for more intensive subsistence agriculture in valley reaches (refer to Plan 6).
3. Areas identified as being conservation worthy are noted as such on Plan 6 (refer Appendix 3) and should be managed as such.

**4.3.7.2 KEY PROJECTS: ACTIVE RECREATION – SPORT**

(refer to Plan 6)

Due to the notable shortage in formally developed and maintained sports facilities relative to the potential user population, several actions need to be instituted to ensure optimal usage of those facilities presently in existence. These include:

1. Notwithstanding the difficulties posed by ownership/jurisdiction being held over different facilities by different Government Departments, the possible sharing of public and educational recreational facilities needs to be fully investigated.
2. Efficient maintenance and management programmes for existing facilities need to be established and upgrading of strategically located facilities (i.e. facilities which are more easily accessible to a larger user population) should be instituted, where required. User contributions to covering costs for such actions can be recouped by various means, including charging of rentals for facilities (i.e. to clubs etc.) that can be recovered (by the clubs) by minimal gate fees at major events.
3. Provision of floodlights at strategically located facilities to allow extended hours where these facilities could be used.

With regard to new developments, the following is noted:

1. A site which is noted as being suited to the development of a 9-Hole Golf Course is identified, located to the south/south-west of the Valley View area (Zone 3).
2. Sites suited to larger scale sports facilities are identified to the north of Potsdam South Neighbourhood 1, to the south of Unit V and on the site of the now-closed solid waste site in Zone 12 which, it is proposed, should be rehabilitated and developed as sports fields in the short-medium term.