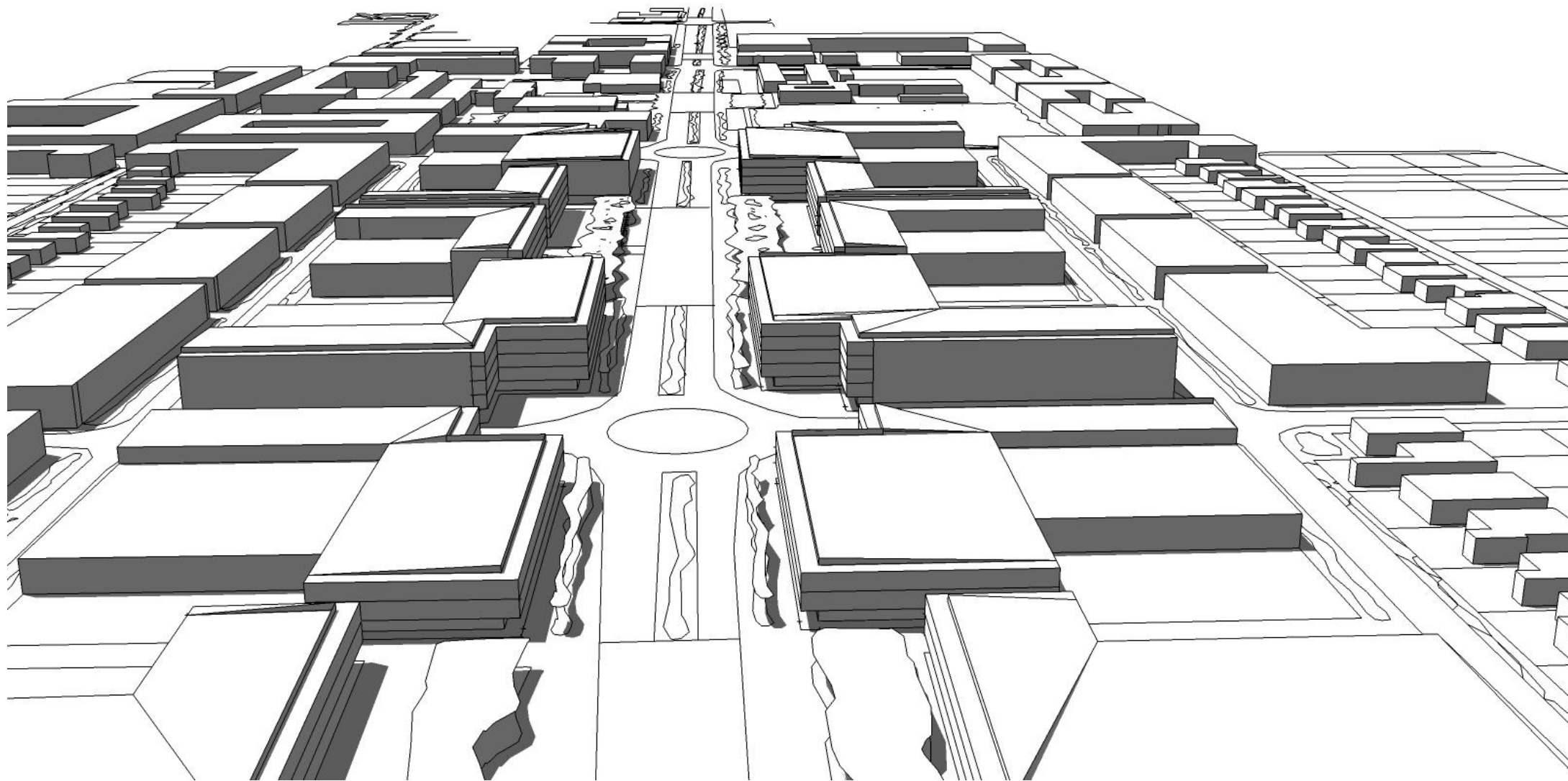


BRIGHTON ROAD, KRAAIFONTEIN



INTEGRATED LANDUSE PLAN AND URBAN DESIGN GUIDELINES FOR BRIGHTON ROAD

JANUARY 2011



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Diagram 1: Study area boundary

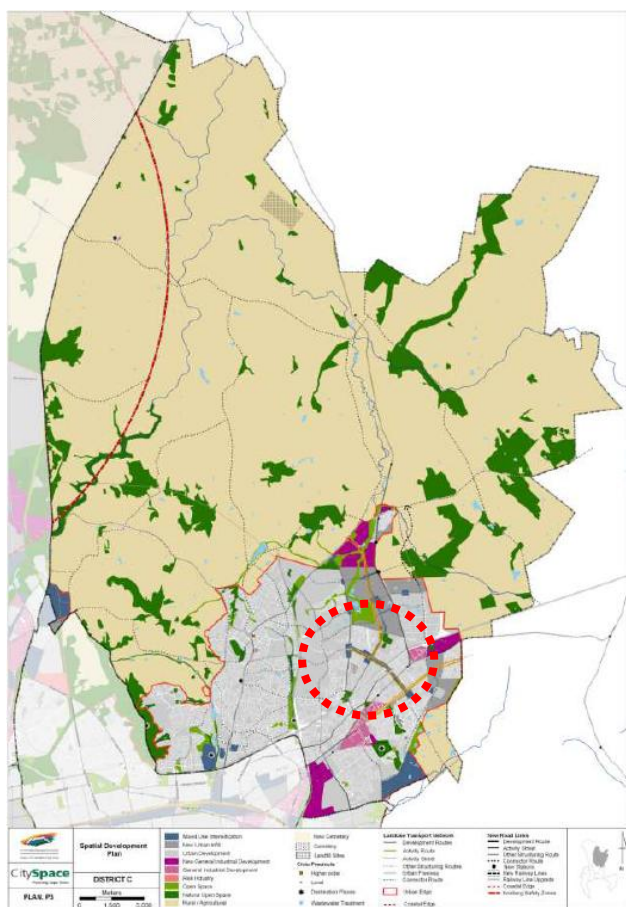


Diagram 2: District C Spatial Development Plan

INTRODUCTION

In May 2010, the City of Cape Town's: Planning and Building Development Management Department appointed ODA to complete a land use plan with urban design guidelines to manage and guide future growth and development along the Brighton Road Route in Kraaifontein.

Although a broader contextual study has been completed as part of this assignment, the land use management tools and urban design guidelines developed in this document should broadly be applied along Brighton Road, from the Okavango intersection to the N1 and along Van Riebeeck Street from the N1 to the Old Paarl Road intersection. The study area boundary is indicated in Diagram 1. To avoid confusion, reference will be made to the 'Brighton Road route' (BR route) when referring to whole route from Okavango Road to old Paarl Road, while Brighton Road and Van Riebeeck Street will be named individually when referring to these separate sections of the route.

1.1 Project background:

Both the City's Spatial Development Plan and the local District Plan for the Kraaifontein area have identified the BR route as being structurally significant with considerable development potential if managed appropriately (refer to Diagram 2). This relates to its close proximity to the 'Northern growth corridor' of the City, having direct access off the N1 freeway as well as intersecting with Old Paarl- Voortrekker Road which is a primary movement and activity corridor in the City. The role of the BR route has been identified to function as a local activity street.

Currently there is not a detailed development or transport management plan in place for the BR route. The consequence of not having a clear guiding 'vision' in place has resulted in ad- hoc decision making leading to poor spatial form and functioning. Although the current need for expansion along both Brighton Road and Van Riebeeck Road is limited, it is recognised that allowing current patterns of fragmented and introverted growth to continue as is, will negatively impact the development potential and future growth options for the BR route in the long term.

Traffic and transport engineers were appointed in a previous and alternative study to prepare an arterial management plan for the BR route. The engineers brief has been to plan for the functioning of the BR route as a feeder route for the Integrated Rapid Transport system that will be implemented at an unspecified time in the future. These mobility requirements have been integrated and where necessary moderated into the planning and urban design proposals to ensure that the long term vision for Brighton Road and Van Riebeeck Street to develop into a well functioning local activity street is not compromised.

1.2 Method and approach

The method adopted to develop planning and urban design guidelines to guide future development along Brighton Road, has been to:

- **Understand the context**, current patterns of growth and development and identify the opportunities and constraints to realising appropriate urban form and performance along the Brighton Road route.
- Develop an integrated **long term vision** (Conceptual development plan) for the entire Brighton Road Route and its immediate surrounds that identifies specific focus areas for long term growth and management.
- Develop and detail the focus areas identified in the vision plan in a series of **Precinct plans** that unpacks and describes the various layers and elements required to develop the BR route into a well performing activity street.
- Develop **detailed planning and urban design guidelines** to enable the proposed vision

A minimalist approach has been adopted, where only the non negotiable and critical elements to support and guide appropriate development responses have been identified. In a context of uncertainty and scarce resources, a facilitative approach has been applied in the development of land use management tools and urban design guidelines for the Brighton Road route.



Diagram 2: Fragmentation & disbursed activity

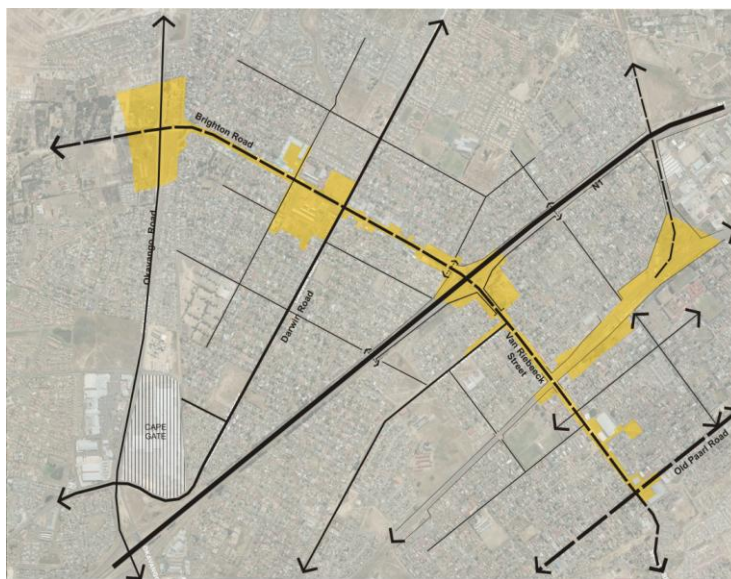


Diagram 3: Vacant & underutilised land



Vacant land surrounding the public facility cluster

STATUS QUO

In order to determine how best to guide future development in the area, an analysis of the BR route and its surrounding context has been completed. This is necessary to determine what external influences are impacting on the functioning of the route as well as to identify the possible opportunities and constraints that relate to the area. Four dominant elements emerged that are discussed below:

2.1 Low density and monofunctional urban form

Kraaifontein is characterised by its low density and predominantly suburban form. This contributes significantly to the low levels of activity currently occurring along both Brighton Road and Van Riebeeck Street, where large numbers of people are not present to stimulate or sustain activity of all forms along its entire length.

In the case of Brighton Road, this is further exacerbated by the eccentric location of the Cape Gate Shopping mall and proposed medical precinct on the Okavango Road- N2 freeway intersection. This has resulted in economic activity being attracted away and competing with Brighton Road, the historic commercial centre for the area. On the Van Riebeeck Street section, a similar but smaller phenomenon is occurring where the Kraaifontein railway station is also drawing activity away from the main activity street. A pattern is starting to emerge whereby the location of new landuses and activities are not reinforcing the structural role of Brighton Road and Van Riebeeck street as important local activity streets within their broader area.

The predominantly low- rise, low density built form along and adjacent to the BR route contributes to a sense of monotony and sameness experienced when travelling along the route. This is further reinforced by the fragmented provision of green amenities in the area and a poor optimisation of the few natural resources in the area. For example: Zoo park is introverted and not legible from Brighton road, while all development adjacent to the existing rivers/ canals in the area, turn their back onto them. The existing natural resources and green amenities in the area need to be more positively optimised to improve the overall character/ 'sense of place' experienced in the area.

Recommendations:

High density mixed- use development in concentrated locations is required to increase economic/ activity thresholds and create a sense of variety/ intensity along Brighton Road and Van Riebeeck street. In the medium to short term, new development of both a public and private nature should be encouraged to occur directly on the BR route in order to reinforce its role as a local activity street in the area.

Existing natural resources and green amenities should be 'stitched' together and enhanced to form an integrated green web that can assist with improving the environmental quality and sense of place in the area.

2.2 Vacant and underutilised land

There are large parcels of vacant and underutilised land occurring directly adjacent to the BR route, as indicated in diagram 3. Although these land parcels perform different functions- road/rail reserve; open public space, parking and vacant private and public land, they collectively contribute to the lack of spatial definition and enclosure experienced along the BR route. This characteristic is particularly prevalent on the Brighton Road section.

A sense of enclosure and spatial definition within the urban environment is required to create comfortable and functional living environments. Although open space is an important and valuable resource within urban environments, it must play a functional role in order to be valued. Currently, a significant portion of the vacant land within the BR route does not play a positive or functional role in enhancing the overall environmental quality or functional

usage of the street. Existing streetscapes and public open spaces along the BR route need to be significantly improved in order to adequately provide for and accommodate pedestrian usage.

In the proposed IRT planning process, there are requirements for a middle road median. This will effectively increase the overall road section and reinforce the sense of openness and lack of enclosure experienced along the route. It is critical that a integrated approach is adopted where the edges of the route are designed together with the proposed road improvements.

A positive aspect of having significant open space available, of which a large proportion is publicly owned, is that the opportunity exists to expand and develop the route in time.

Recommendations:

Vacant and underutilised land must be minimised. Open spaces must be given a specific and functional role in order to promote pedestrianism and create safer and more comfortable outdoor environments. Buildings should positively respond to open spaces to assist in promoting their usage.



Diagram 4: The 3 distinct precincts characterising the BR route

2.3 Spatial fragmentation and varying character along the route

Along its length, the BR route Road is divided by several high order routes, namely the N2 freeway, railway line, Okavango and Frans Conradie Road. This contributes to the varying character and fragmented nature of the entire Brighton Road- Van Riebeeck route. Although it is a continuous route and has a similar cross section along its length, Brighton Road and Van Riebeeck street ‘feel’ like different streets. The varying character experienced along the route is influenced by several factors:

- Income groups they serve;
- Type of economic activity
- Building location to the street (setback)
- Building typology & erf block configuration
- Parking location & provision of parallel side streets
- Sidewalk/ road width and provision of sheltered walkways
- Tree planting & hard landscaping treatment

The photo analysis of both Van Riebeeck street and Brighton Road below, illustrates the particular and distinct characteristics of each street section.

Van Riebeeck Street: *In general, from a street performance level, Van Riebeeck street performs better in its role as a local activity street. Its current form and structure is better suited to facilitate and accommodate increasing activity and growth in the long term, but it suffers from a lack of investment within the public environment. This is contributing to its neglected and ‘tired’ appearance*

View from the railway bridge, showing a range of residential options. The multi-storey housing building is a new & positive addition to the area	Views into Van Riebeeck street with mountain views in the distance	Van Riebeeck street Gateway	Van Riebeeck Street and Old Paarl Road intersection, showing the poor quality treatment of the public environment.	Typical street cross section

Brighton Road: Along Brighton Road, buildings do not have a direct relation to the street due to their wide setbacks and provision of parking areas on the road edge. Brighton Road has greater characteristics of an ‘activity route’ which is less intimate in scale. Motor vehicles dominate the environment and move at greater speeds, making it less pedestrian friendly.

It is important to note that although the BR route is fragmented, it is still well resourced in terms of public facilities and recreational amenities. There is a high order public facility cluster on Brighton road with a primary school and large park in close proximity. A smaller community centre is located on Van Riebeeck Street with a large sporting facility on Frans Conradie road.

Brighton Road				
				
Emerging business activity on Brighton Road, in the form of house conversions with minimal start-up capital	Top part of Brighton Road, near Okavango Road. Attractive tree planting but buildings turn their back to the street creating a dead street interface..	Parallel road system at school, which significantly widens the road and contributes to the lack of enclosure experienced along the street.	Buildings setback long distances from the road edge with un-surfaced road reserves.	Parking located in the front of buildings



Diagram 5: Brighton Road- patterns of growth



Shopping mall types of development – an emerging trend on Brighton Road

Recommendations:

The same principles to achieve well performing streets and comfortable pedestrian environments should be applied, however a one- size- fits – all approach to land- use management and facilitating future growth options should not be applied. The essential differences of Brighton Road and Van Riebeeck Road and the roles they play within the broader context should be recognised and preserved.

2.4 Patterns of Growth

An emerging and legible pattern of growth is occurring along Brighton Road. The smaller starter businesses/ home conversions are predominantly located on the southern edge of the road while the larger businesses and franchises are on the northern edge. Erf consolidation into larger blocks are significantly greater on the northern side. Brighton Road has reached a point in its evolution where economic activity is starting to occur on both sides of the street. This is a positive trend for the street even though the form of development may be marginal on its southern edge.

As indicated on diagram 5, the consolidation of erven has largely occurred along Brighton road, with the emergence of a few businesses along Darwin Road. It is anticipated that an increase in business activity along Darwin Road will occur if not managed appropriately. This trend to connect with the Cape Gate shopping mall could negatively impact on the surrounding residential fabric as well as economic activity on Brighton Road.

Development and growth, particularly on the northern road edge is currently being constrained due to limited access points and a historic midblock access route that is no longer appropriate to its context. Where possible land owners have negotiated shared access points but this is not a long term solution. Public parking is generally located in the front of buildings adjacent to the street. For larger businesses the provision of large at grade parking areas is starting to erode the grain of development.



Diagram 6: Van Riebeeck Street- patterns of growth

The block size along Brighton Road is 300m wide, which is not optimal. It creates an inconvenient pedestrian network and could result in large building blocks if all erven are consolidated. The consolidation of erven into large development blocks, as has occurred on the Kipling- Brighton road intersection should not be repeated. A fine grain development grid is best suited for pedestrian access and for supporting ongoing growth and development.

Along Van Riebeeck Road, the consolidation of erven is restricted to the northern side of the road. Although the development along Van Riebeeck street appears to be more mature, economic activity has not crossed onto its southern edges. The starter industries/ car lots that are prevalent along Brighton Road are also present on Van Riebeeck street. Growth is occurring in a slow and organic manner as need arises. The current form and scale of development is appropriate and in keeping with its context.

Economic activity is also occurring along Station road, creating an alternate and parallel activity system to Van Riebeeck street. Improved links and greater legibility to the station is required, as the station is currently very introverted. To achieve this, the management of growth along Van Riebeeck street in the future must be integrated with activity occurring within the greater Kraaifontein station precinct.

A new 6 storey residential building has recently been constructed on the southern side of the railway buffer strip. This is first higher-density housing example in the area and is a positive trend.

Recommendations:

The consolidation of erven to form large blocks must be avoided. The provision of public parking should be located to the back of buildings or limited in size when located directly of the street. New development should be encouraged on both sides of the street.

LONG TERM VISION

A long term vision has been developed which provides an integrated understanding of the entire Brighton Road route. Although it has been identified that sections of Brighton Road function independently, a holistic view of both Van Riebeeck Street and Brighton Road has been taken to achieve better legibility for the route and improve its overall performance.

3.1 Role and street function

In defining a long term vision for the BR route, it is important to identify and locate the role and order of the BR route within its broader context. This will clearly indicate the appropriate type and form of development responses that should be promoted in the long term plan for the area. To assist with this, the City's definition and categorisation of streets provided in 'Planning Cape Town' document has been referred to. The definition of 'activity streets' and 'activity routes' are described as follows:

Activity streets also called main streets have the following characteristics;

- *Local street section of concentrated activities including mixed land uses, businesses, local institutions and facilities, public transport and higher densities.*
- *Local area road which allows for a high degree of access to activities (inclu. pedestrians). Direct access with stop-start movement patterns including the provision of public transport. Supports intense pedestrian activity*

Examples: Main Road: Woodstock-Wynberg, Main Road Somerset Wes/ Strand, Kloof Street, Long Street, Halt Road, Klip Road, and Gabriel Road.

Activity routes (Class 3 transport route) have the following characteristics;

- *City-wide to inter-district activity route directly linked to continuous development including centres/ nodes, mixed land uses, commercial/ business developments and light industry, institutions, social facilities (inclu. recreation), transport interchanges and higher density development. –*
- *Intermittent movement patterns incorporating public transport (inclu. commuter rail). Direct access on route with interrupted movement flows especially at bus/ taxi stops and at traffic lights and intersections. Pedestrian orientated in sections.*

Examples: Main Road: Voortekker/Van Riebeeck Road, Sea Point Main Road to Camps Bay, Koeberg Road

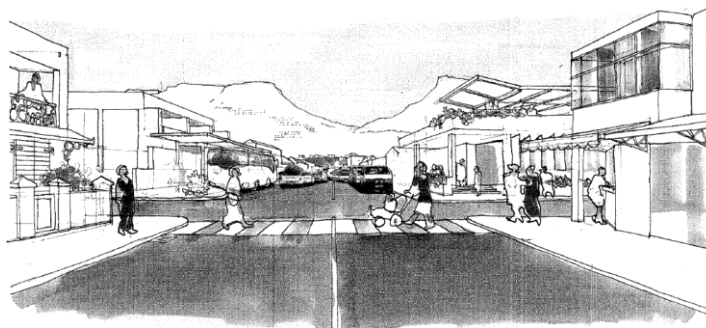
From the descriptions provided above, it is clear that the BR route is a hybrid as it shares characteristics of both an activity street and activity route. The primary elements that link it closely to that of an activity route relate to:

- its strategic location and direct links to Voortrekker/ Old Paarl Road and the N2,
- it serves an inter-district function with some high order public institutions on its length
- its cross- section, with 2 lanes in each direction and a new road median, that is due to be implemented.

The elements that link it to that of an activity street classification relate to:

- the level, type and intermittent nature of activity that occurs along the route
- high degree of access to activities

Although the BR route contains characteristics of an activity route, the dominant element that informs its overall performance as a street relates to the current levels and type of activity experienced along its length. As discussed in the Status quo section above, activity along its length is intermittent and emergent and closely fits the activity street description. Therefore the **long term vision or conceptual development plan for the BR route will support**



City SDF: Activity street cross- section

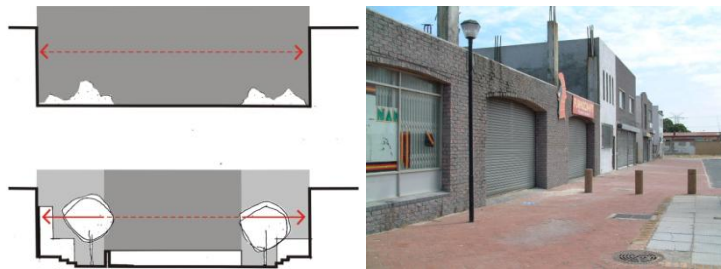


City SDF: Activity route cross- section

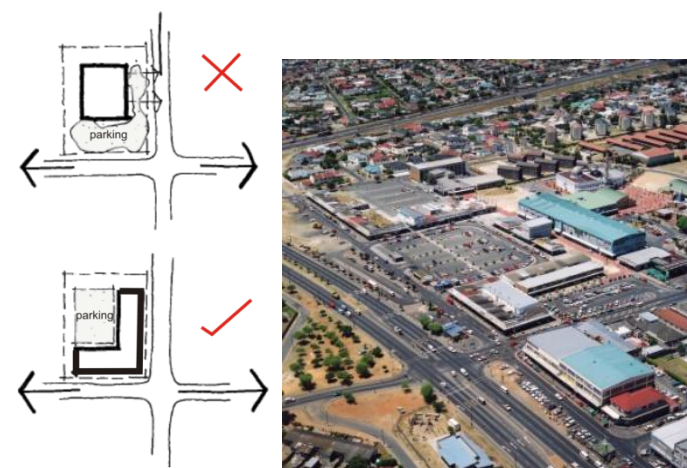
and advocate future development options that will emphasise its activity street characteristics, while trying to mitigate the inherent contradictions associated with its hybrid nature.



Kloof Street and Main Road Claremont- **high density and mixed use streets** Examples of commercial activity occurring on the ground floor with residential apartments above.



Blank facades and solid boundary walls facing onto the street are to be avoided. Transitions from public to private space with **open interfaces** are necessary to activate the street.



Large open parking lots sterilises the street. **Parking** located to the rear of buildings is to be promoted **or integrated with the design and functioning of public spaces.**

3.2 Activity streets: performance criteria

Well performing activity streets have a few dominant and common characteristics. These qualities will be briefly described as they form the foundation to the concepts and proposals put forward in the conceptual development plan and later detail proposals and guidelines in the document.

Well functioning activity streets are:

- ‘walkable and pedestrian friendly’
- ‘scaled and designed to promote outdoor street activity and pedestrian comfort and safety’
- ‘intense, vibrant, stimulating and offer a range of activities and experiences’

The images below start to describe what street characteristics it is envisioned that the BR route will start to incorporate.



Long Street, Cape Town



Las Ramblas; Barcelona



Main Street: Delft, Netherlands

To achieve these qualities the following key elements are required:

- Development along its length needs to be of a **mixed use and high density** nature. This will ensure a vibrancy and range of activities as well as high pedestrian volumes.
- To support high density development, **good quality outdoor amenities** are critical. The design of the public environment with the provision of a range of outdoor spaces, must also be considered when promoting intensification and densification. The street must also be considered as one of the types of outdoor spaces available within the public environment and should subsequently be designed to support a range of uses and activities.
- Buildings must provide comfort and protection from the elements. Wide sidewalks with adequate space for tree planting and colonnaded edges or canopies are critical to ensure this.
- Buildings at street level should be interactive and stimulating to promote pedestrian activity. Blank/ dead facades must be avoided and boundary walls must be visually permeable.
- Parking should be located away from primary pedestrian areas, preferably in parking garages within buildings (below ground or from the 2nd floor upwards) or in parking lots at the back of buildings.
- Building development blocks need to be scaled to support comfortable pedestrian access. Fine grain urban environments create the most comfortable walking conditions for pedestrians and cyclists. Development blocks that are longer than 150m start to create inconvenient walking distances for pedestrian and must be avoided in the planning phase.

3.3 CONCEPTUAL DEVELOPMENT FRAMEWORK

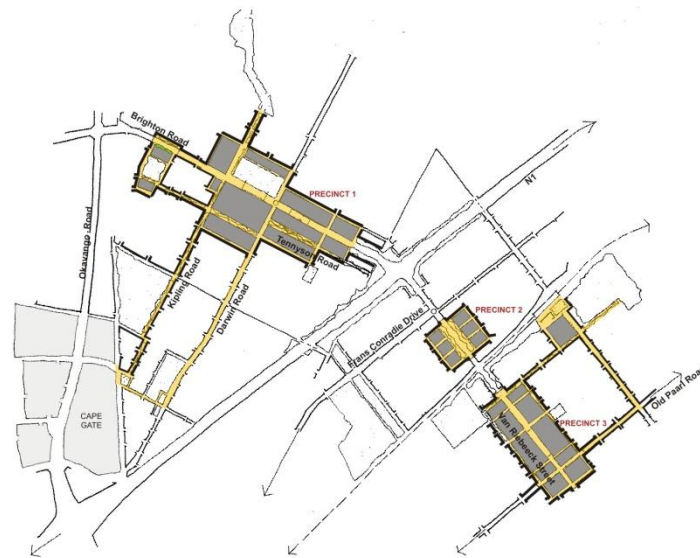
Apart from the generic principles discussed above, at a context specific level, critical elements that should be addressed consistently along the entire BR route relate to improving the environmental quality of the area, optimising vacant public land and facilities, improving the character and quality of the street interface and facilitating the development of efficient/ comfortable public transport along its length.

Therefore the main elements considered in the overall conceptual development plan relate to the following:

- Identifying areas or precincts where future development should be clustered and intensified.
- Promoting the development of high quality public environments that support comfortable and safe pedestrian usage and the integration of existing natural resources and green amenities.
- Promoting an integrated movement and land use network, where new forms of development will support the development of efficient public transport and non- motorised transport (NMT)

Each of these layers are unpacked below:

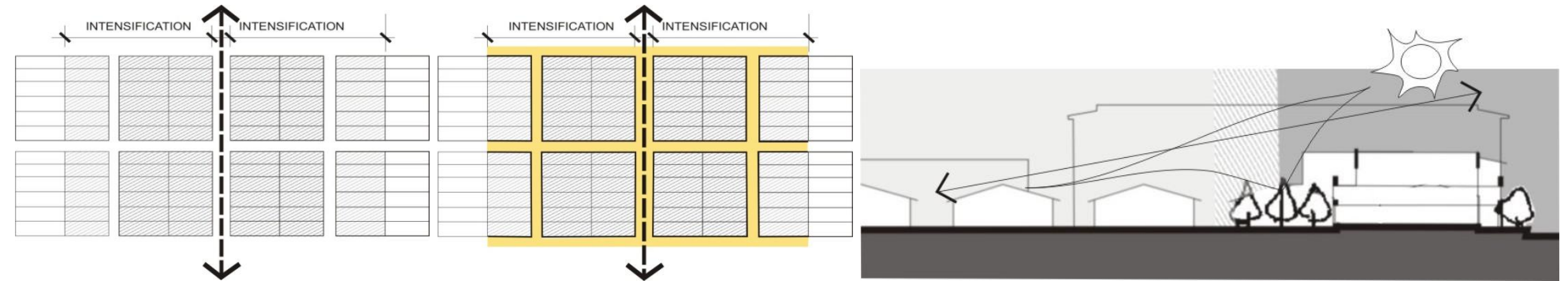




Areas for intensification

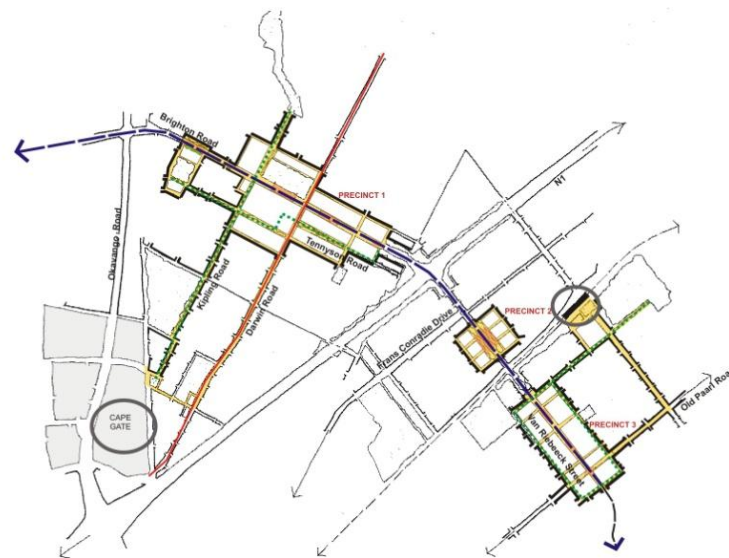
AREAS FOR INTENSIFICATION

Three primary areas have been identified for future growth and intensification along the BR route. All growth should be directed to these precincts in order to start to assist emerging business/ activities in the area. Development must be mixed use and high density in nature in these areas to encourage greater activity. The width of intensification varies within each precinct in response to the local context, however the general principle applies that densification should extend 1.5 blocks back from the main activity street. Densities should also be at their greatest on the main road and taper back to form a comfortable transition to the existing residential fabric. Improvements to the public environment must be integrated with the intensification of development blocks.



Guiding principles:

- Intensification limited to specific precincts and of a mixed use- high density nature.
- The depth of intensification to be achieved varies according to the context, need and grid configuration.
- Highest densities to be attained on the primary activity route and should taper to ensure protection of views and limited over shadowing to existing smaller scaled buildings.
- Intensification of blocks/ erven must include and integrated with upgrades to the public environment. This includes the main activity street as well as side and back streets within the intensification zone.



Integrated movement network

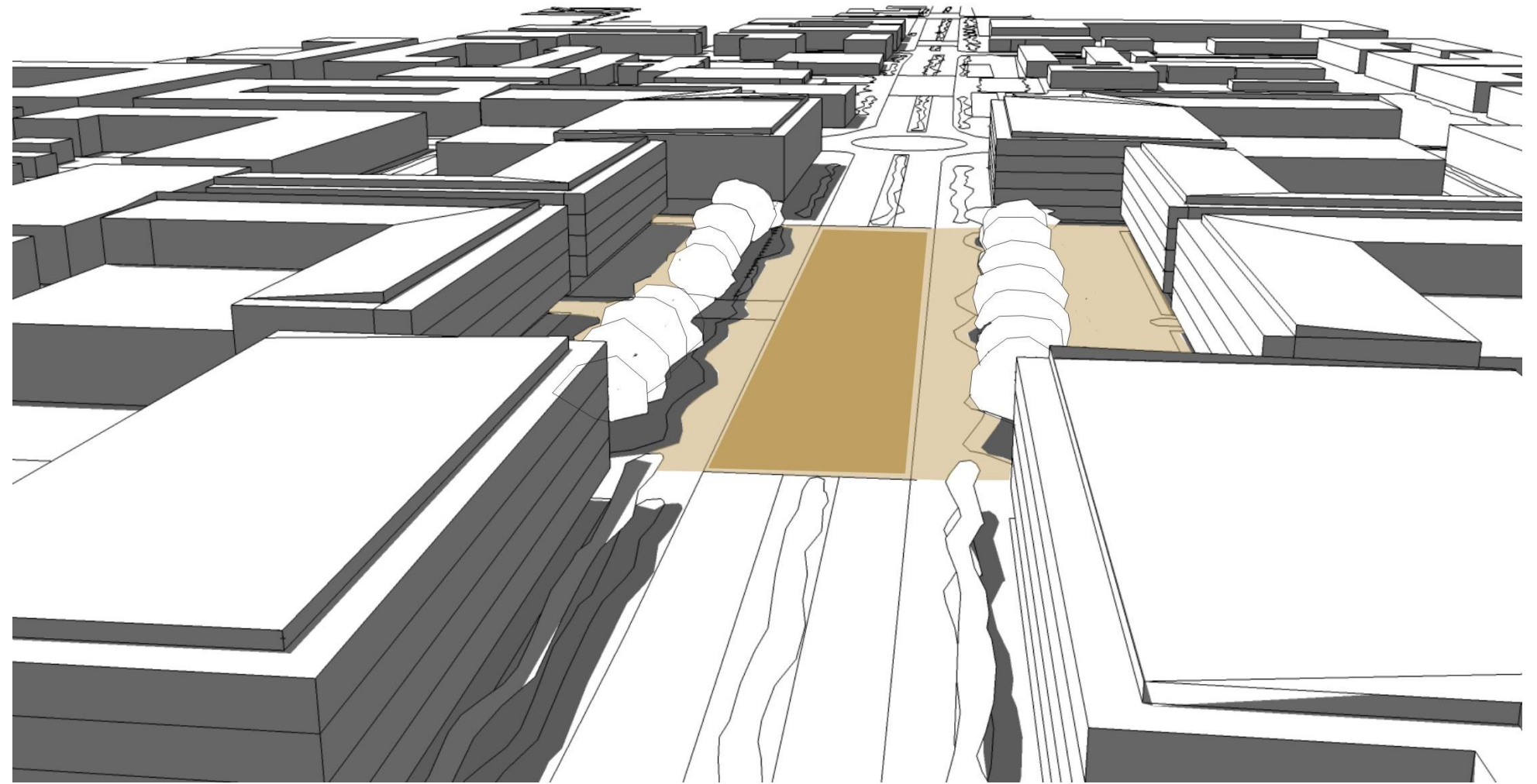
INTEGRATED MOVEMENT NETWORK

The movement system has been expanded to include a range of routes to provide a variety of movement options. Brighton road/ Van Riebeeck street will function as the main activity spine through the area. Mid block crossings are proposed to avoid pedestrian and vehicular conflict. The mid- block crossings will align with public transport stops and public forecourts areas that will function as multipurpose spaces that will accommodate some public arking. Where necessary, existing development blocks will be divided to facilitate greater pedestrian access and promote better urban form.

A secondary movement system that's located one block back from the activity street is proposed that provides an alternative movement route that will give NMT priority/ right of way. This system will integrate with the green network

Guiding principles:

- use of mid block crossings
- Pedestrian priority Secondary movement network



Brighton Road: the perspective above indicates the proposed scale of intensification proposed, as well as how built form will be required to respond to the introduction of mid-block crossings along the route. Buildings should be set back to form multi- purpose courts that will also function as public parking areas.

GREEN NETWORK

An integrated green network has been developed that integrates existing natural green resources and green amenities. Tree avenue planting with hard landscaping will be used to stitch the network. It is important to provide good quality outdoor environments when promoting densification, while an improved public environment will create confidence in the area and create a strong sense of place for its residents.

Guiding principles:

- *Structured tree planting to integrate existing natural resources and green amenities*
- *Tree planting to occur on both edges of the main activity route.*



Green network

DEVELOPMENT PRECINCTS

The specific recommendations for each individual development precinct will now be separately discussed and unpacked.

4.1 Precinct 1: Brighton Road



Brighton Road: Existing context

Precinct 1 is located between Okavango Drive and the N1 freeway. The focus of the conceptual development plan for this area has been to develop a land use response that will mitigate the potentially negative impacts associated with the proposed road improvements, while also addressing the existing negative elements that are currently impacting on the overall performance of the street.

The conceptual development framework indicates the following:

- The areas where development should be intensified and the location/ form of future development blocks
- The critical interface and edges conditions that must be protected
- The location of existing and new public spaces and the focus of future public space investment



A hierarchy of movement routes are indicated on the plan as well as the appropriate location for private and public parking.

MOVEMENT NETWORK

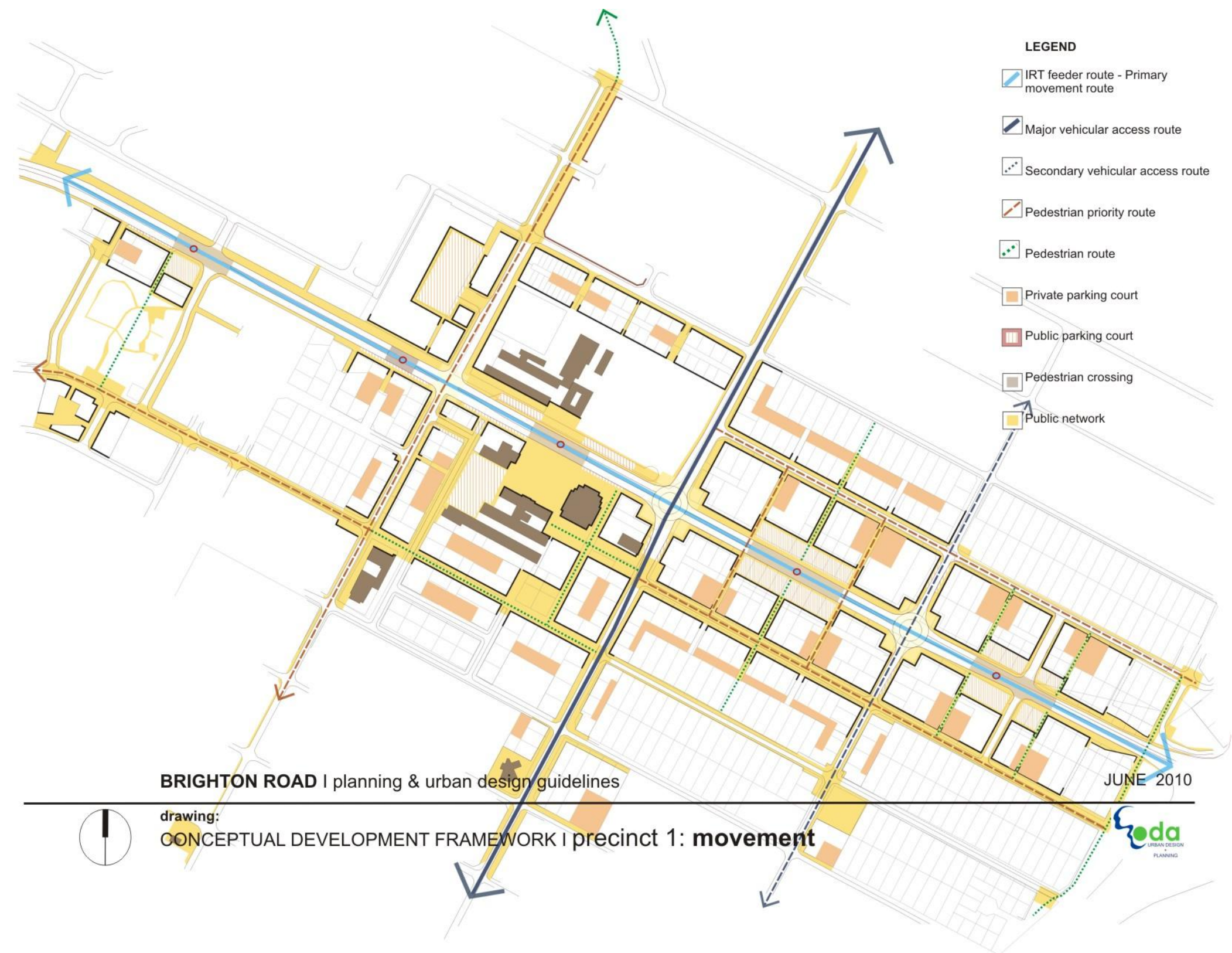
Future road improvement proposals include the introduction of vehicular turning circles and a road median on Brighton road. To counter the possible negative impacts to pedestrian access and urban form associated with these elements, the introduction of the following is proposed;

- Mid- block crossings that integrate with public transport stops and multipurpose courts.
- These courts are to be located in the centre of each existing development block and should also function as collective public parking areas.
- The development blocks are to be divided into 4 blocks that will facilitate both vehicular and pedestrian movement through them.

Off street public parking along Brighton Road should be consolidated to only occur within the proposed multifunctional courts. This will ensure some of the buildings along the street edge will still have a more direct relationship with the street as well as introduce some variety along the road by having a range of setback conditions.

The pedestrian priority routes proposed as a parallel system to Brighton road provides an alternative to the activity route and is envisioned to function like the 'woon- erf' concept introduced by the Dutch. The street in this location should be designed as an outdoor living space that accommodates a range of activities.

Interface conditions within the intensification area will vary according to the hierarchy of the street type, but they are all required to facilitate safe, stimulating and comfortable conditions for pedestrians (refer to guidelines)



PUBLIC ENVIRONMENT

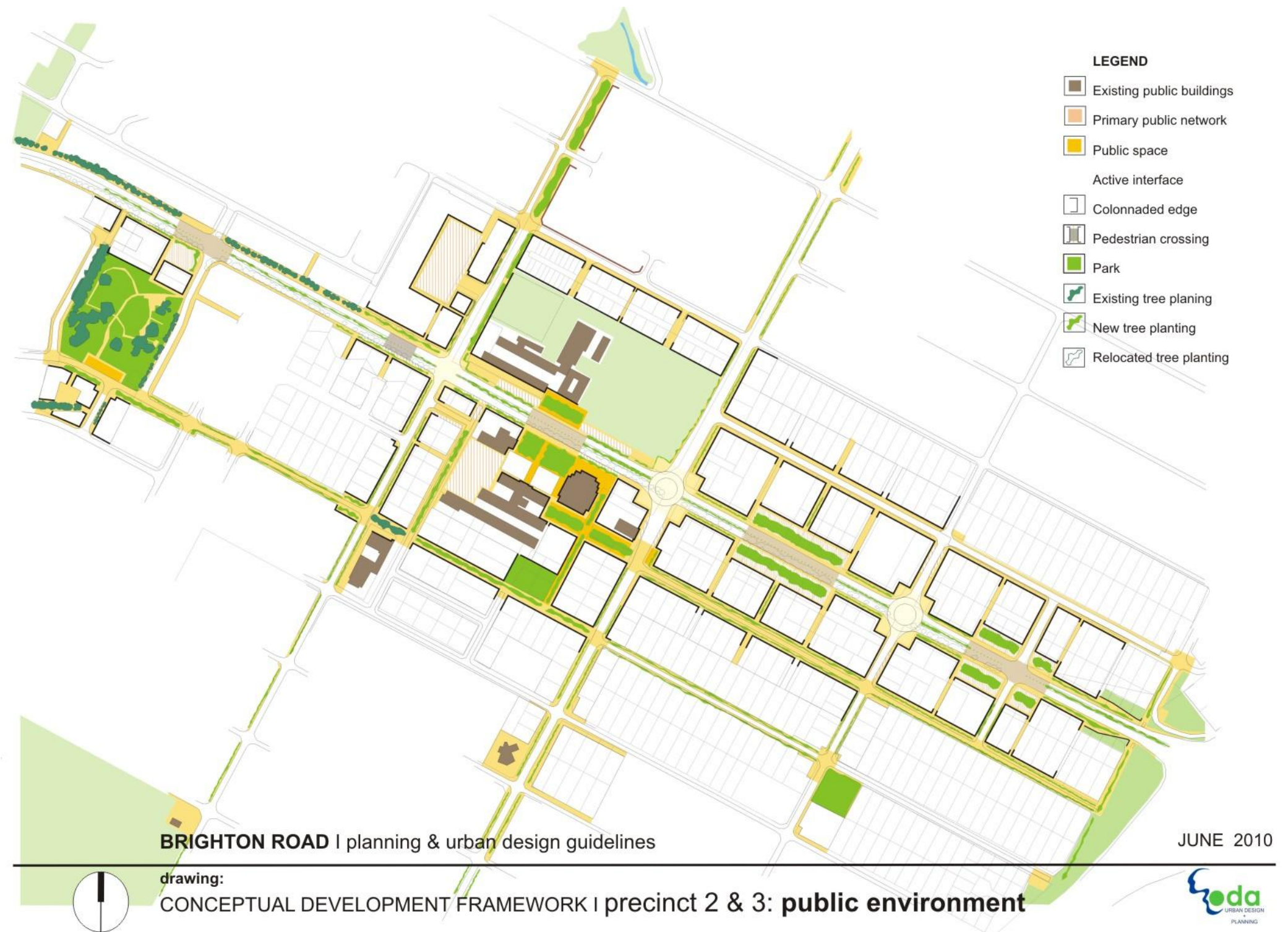
A North- South and East-West green network has been introduced to stitch the existing natural and recreational amenities that occur within close proximity to Brighton Road. It is proposed that structured street tree planting with wide sidewalks and new public spaces/ parks where possible should integrate existing green elements to form a coherent system.

The most significant green amenity in the area is **Zoo Park**. It is currently introverted and not easily visible to outsiders. It is proposed that the vacant land surrounding the park on its southern edged is developed for high density housing and that the existing development on its northern edge is restructured to improve pedestrian access to the park from Brighton road as well as the introduction of new forms of activity that are more compatible with park activities.

The vacant land surrounding the **public facility** on Brighton Road should be developed and intensified, while existing public spaces within the complex need to be restructured so they can be more functional. High density housing, more public facilities and a range of public spaces are proposed on the existing vacant land. The introduction of a play park accommodating all age groups; open air market space and outdoor concert space should be investigated to encourage greater public life in the precinct as this area forms the central destination point for the area.

The critical interface conditions required to support a safe and stimulating public environment are indicated on the plan. They are as follows:

- Along Brighton Road and primary movement routes, buildings are to provide a shaded walkaway space of min. 2.5m as well as have active and open interfaces to the street.
- No solid boundary walls are permissible in the intensification area. Walls are required to be visually permeable.



LAND USES

No existing rights will be taken away or diminished. To promote changes in land use and urban form departures for height/ bulk and rezoning should be favourably considered if they support the long term vision provided in this document.

Mixed use high density development is to be promoted in the intensification area. A range of uses are required to create increased activity within the area. In general, commercial and retail uses are promoted on the ground and first floors along Brighton road with residential above.

The plan indicates the new form of block consolidation that is to be followed. The existing 300m grid has been divided into 4 blocks of approximately 75m and allows for incremental growth to occur. It will also facilitate direct and easy vehicular/ pedestrian access to the blocks. The shared parking and access routes required to support this consolidation model will have to be negotiated over time.

The depth of intensification from the primary activity street varies along the route and relates to locational hierarchy.

To ensure a comfortable transition between existing and new landuses are achieved, high density residential land uses should back onto existing residential units and private parking with landscaping should be located between the new building and its back boundary line.

As indicated in the plan, perimeter or courtyard type built form is promoted in order to ensure transitions from public to private areas and the making of private and secure internal spaces.

Corners buildings on road side edges with a turning circle are required to step from the street edge so that collectively all the buildings surrounding the turning circle will form a contained space. This will ensure that the built form instead of the turning circle is the dominant element in the streetscape.



HEIGHT AND CRITICAL EDGES

The greatest height that can be achieved within the intensification zone is 5 floors (17.5m) and will only occur in blocks directly abutting Brighton Road.

Height has been used as a mechanism to denote the urban centre.

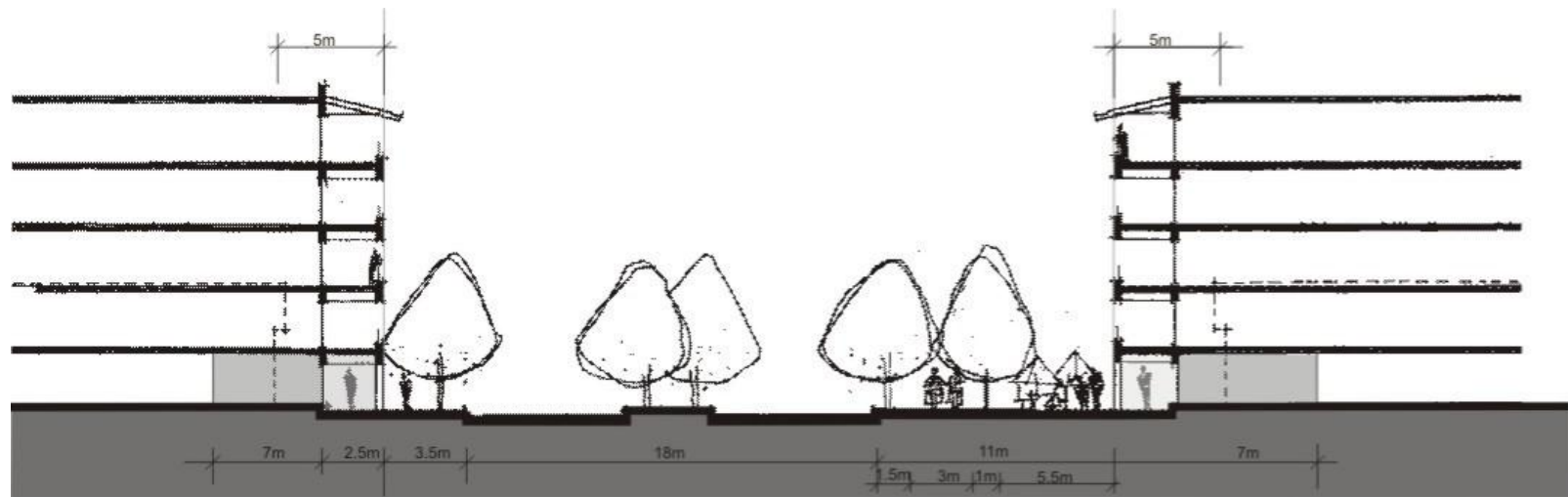
Refer to sections below for more info.



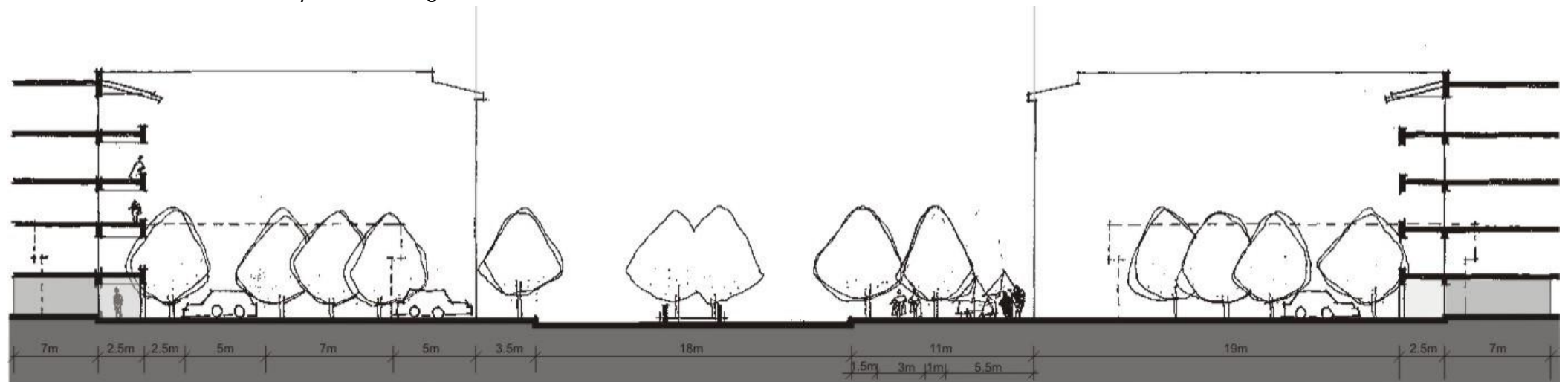
HEIGHT



Intensification zone- Brighton Road cross section indicating how greatest height will be achieved directly on Brighton Road and then will taper down to create a comfortable transition with the existing residential fabric

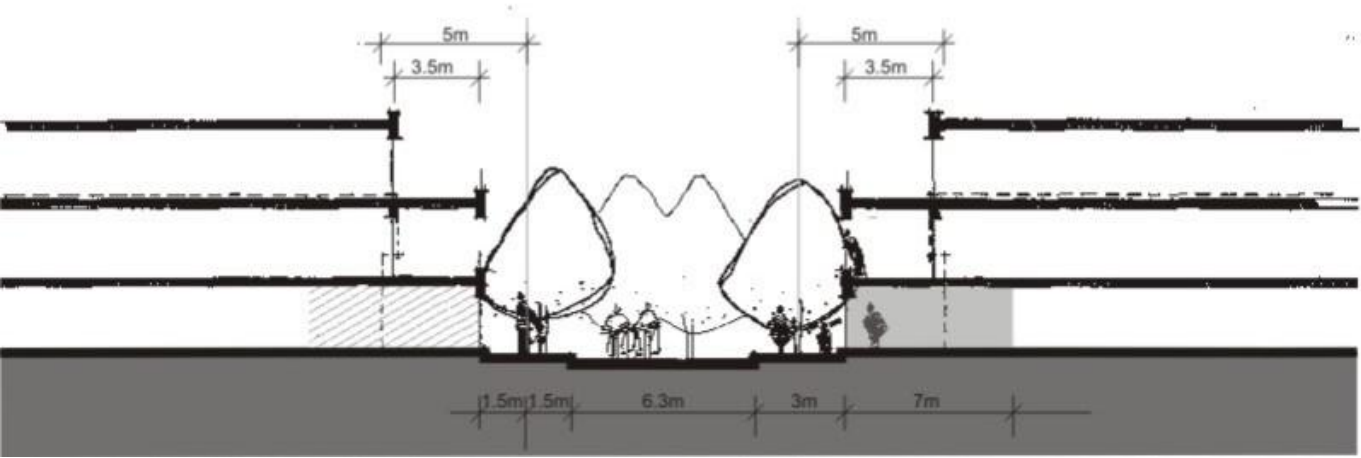


Brighton Road: typical section- Buildings have a zero building line and a compulsory shaded sidewalk. On the eastern side of the road, the buffer strip between the road edge and erf boundary will function as a multipurpose area that will accommodate NMT, boulevard tree planting and outdoor seating areas. Active interfaces are required on the ground floor with balconies above.



Brighton Road: mid block section- showing how buildings are set back from the street to create multi-purpose public spaces that will also accommodate public parking. Active interfaces are required on the ground floor with balconies above

HEIGHT



Tennyson Street: typical section- buildings have a zero building line and on upper levels are set back to limit overshadowing and improve sightlines to the sky. Active interfaces are required on the ground floor with balconies above.



Van Riebeeck Street: Existing context

Precinct 2 is located between Frans Conradie Drive and the railway line. It is proposed that the vacant road reserve that is currently sterilising the street is developed for high density housing with small scale commercial activity on the ground floor in order to take advantage of its close proximity to good public transport.

Precinct 3 is located between the railway line and Old Paarl road. The focus for this area has been to improve connections and legibility to the railway station and promote greater synergies between Van Riebeeck Street and Station Road. As per Brighton Road, the conceptual development plan for Van Riebeeck Street road has put forward a land use response that will mitigate the potentially negative impacts associated with the proposed road improvements, while also addressing the existing negative elements that are currently impacting on the overall performance of the street. The conceptual development framework for both precincts indicates the following:

- The areas where development should be intensified and the location/ form of future development blocks
- The critical interface and edges conditions that must be protected
- The location of existing and new public spaces and the focus of future public space investment

4.2 Precinct 2 and 3: Van Riebeeck Road



A hierarchy of movement routes are indicated on the plan as well as the appropriate location for private and public parking.

Future road improvement proposals include the introduction of vehicular turning circles and a road median on Van Riebeeck Street. To counter the possible negative impacts to pedestrian access and urban form associated with these elements, the introduction of the following is proposed;

- Mid- block crossings that integrate with public transport stops and multipurpose courts.
- These courts are to be located in the centre of each existing development block and should also function as collective public parking areas.

To promote better integration between Van Riebeeck street and the station, 9th Avenue should be prioritised as an important west- east link and should be developed to support public transport and increases economic activity along its length.

High density housing should be promoted on the vacant land between the railway line and 11th Avenue, in order to take advantage of its close proximity to Kraaifontein station. 11th Avenue should be designed to function as a pedestrian priority route.

Off street public parking along van Riebeeck Street should be consolidated to only occur within the proposed multifunctional courts and existing public parking areas. This will ensure some of the buildings along the street edge will still have a more direct relationship with the street as well as introduce some variety along the road by having a range of setback conditions.

The pedestrian priority routes proposed as a parallel system to Van Riebeeck street provides an alternative to the activity route and is envisioned to function like the 'woon- erf' concept. The street in this location should be designed as an outdoor living space that accommodates a range of activities.

Interface conditions within the intensification area will vary according to the hierarchy of the street type, but they are all required to facilitate safe, stimulating and comfortable conditions for pedestrians (refer to guidelines)

MOVEMENT NETWORK



PUBLIC ENVIRONMENT

As discussed previously, the structure of Van Riebeeck Road does not require any changes to support intensification and growth over time. However the current state of the public environment is poor and requires significant investment.

Currently existing public buildings and recreational facilities are inappropriately fenced off. They need to be opened up to have a more positive relationship with the street.

Existing public and recreational facilities have been stitched with structured tree planting and pedestrian sidewalks to make an integrated green network.

The critical interface conditions required to support a safe and stimulating public environment are indicated on the plan. They are as follows:

- Along Van Riebeeck Street and primary movement routes, buildings are to provide a shaded walkaway space of min. 2.5m as well as have active and open interfaces to the street.
- No solid boundary walls are permissible in the intensification area. Walls are required to be visually permeable.



No existing rights will be taken away or diminished. To promote changes in land use and urban form departures for height/ bulk and rezoning should be favourably considered if they support the long term vision provided in this document.

Mixed use high density development is to be promoted on both sides of the road in the intensification area. A range of uses are required to create increased activity within the area. In general, commercial and retail uses are promoted on the ground and first floors along Brighton road with residential above.

The plan indicates the intensification of development along 11th and 9th avenues to facilitate greater integration with Kraaifontein station. Intensification of development should also be promoted around Kraaifontein station which currently has a park 'n ride facility. Linkages across the railway line need to be improved.

Unlike the Brighton Road precinct, the depth of intensification from the primary activity street does not vary and should only to be promoted 1 erven back. This relates to the existing grid configuration of the area as well as current and anticipated need. There is also the view that the existing residential stock in the area caters to a specific income group that requires protection to ensure that affordable housing is maintained.

To ensure a comfortable transition between existing and new landuses are achieved, high density residential land uses should back onto existing residential units and private parking with landscaping should be located between the new building and its back boundary line.

As indicated in the plan, perimeter or courtyard type built form is promoted in order to ensure transitions from public to private areas and the making of private and secure internal spaces.

Corners buildings on road side edges with a turning circle are required to step from the street edge so that collectively all the buildings surrounding the turning circle will form a contained space. This will ensure that the built form instead of the turning circle is the dominant element in the streetscape.

LANDUSES

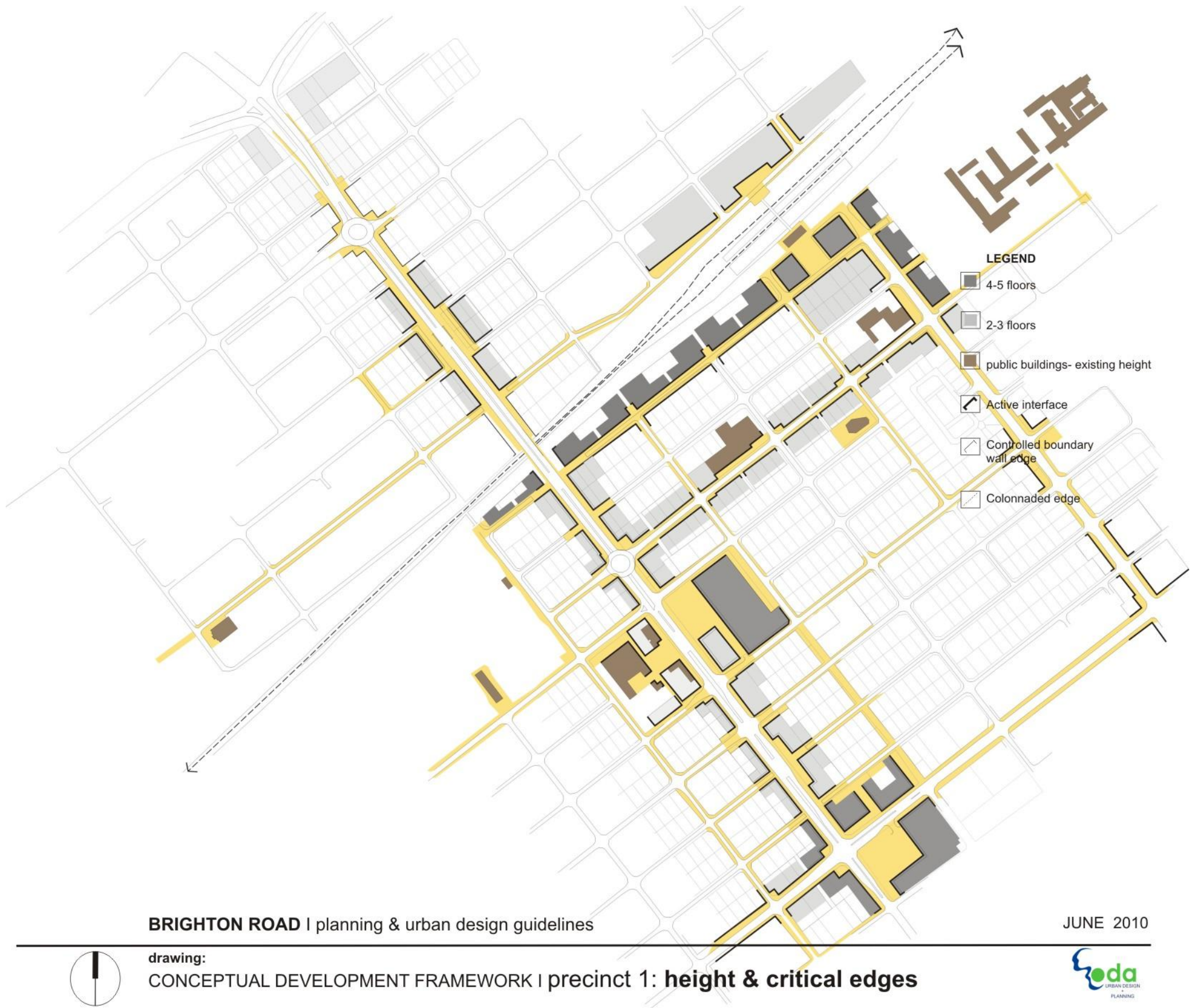


HEIGHT AND CRITICAL EDGES

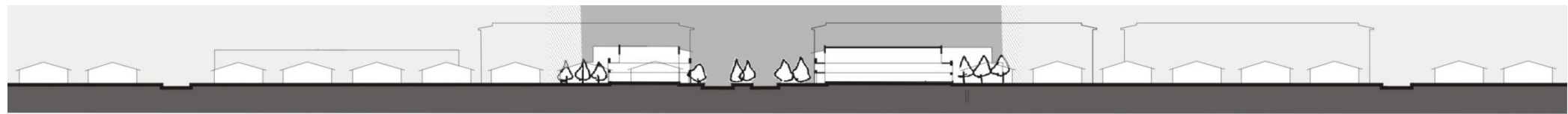
The greatest height that can be achieved within the intensification zone is 5 floors (17.5m) and will only occur in blocks directly abutting the railway line and at the intersection around Old Paarl Road.

Height has been used as a mechanism to denote hierarchy in the area and in the case of the railway line reserve to form a buffer.

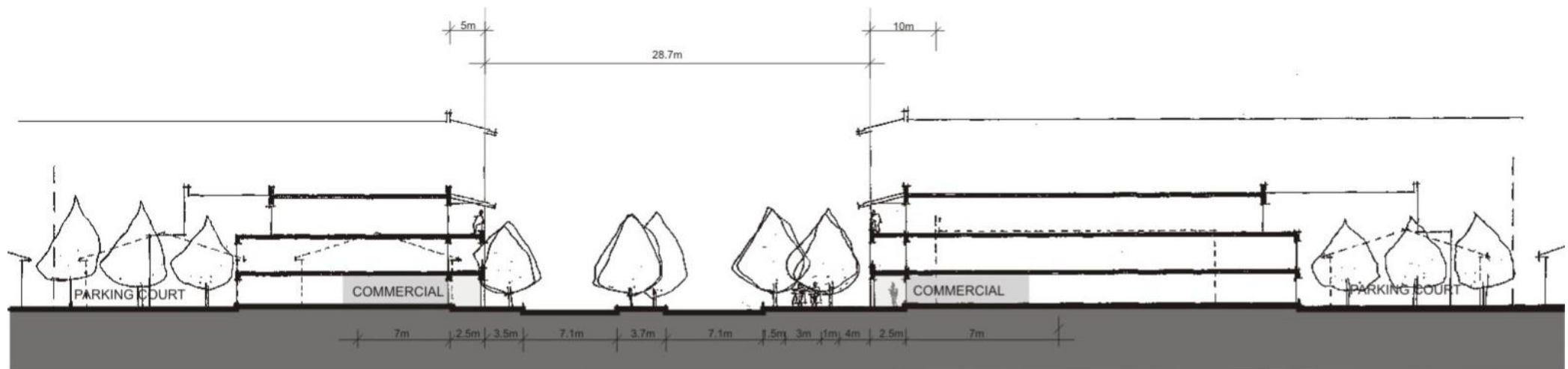
Refer to sections below for more info.



HEIGHT



***Intensification zone- Van Riebeeck Street cross section** indicating how greatest height will be achieved directly on Van Riebeeck Street and then will taper down to create a comfortable transition with the existing residential fabric. Intensification of development will only be 1 erven deep due to the existing grid configuration.*



***Van Riebeeck Street: typical cross section** Buildings have a zero building line and a compulsory shaded sidewalk area. More space is available on the eastern side of the road, which function as a shared NMT pedestrian area. Active interfaces are required on the ground floor with balconies above*



In order to test the concepts and proposals put forward in the broader planning work for the area, a detail block study has been completed. It will specifically unpack issues relating to erf consolidation, transport and traffic management, parking arrangements as well as defining the quality and character of the public environment. The boundary area for the detail block study on Brighton Road is between Darwin Road /York street and Shelley street and Joubert street.

Although only a small area is being developed in detail, the principles that are being expanded and tested are relevant to the whole BR route. The concepts that are particularly applicable to the whole route relate to the manner in which erf consolidation should be promoted, multipurpose shared parking courts, building footprints and mid block pedestrian crossing and public transport stops.

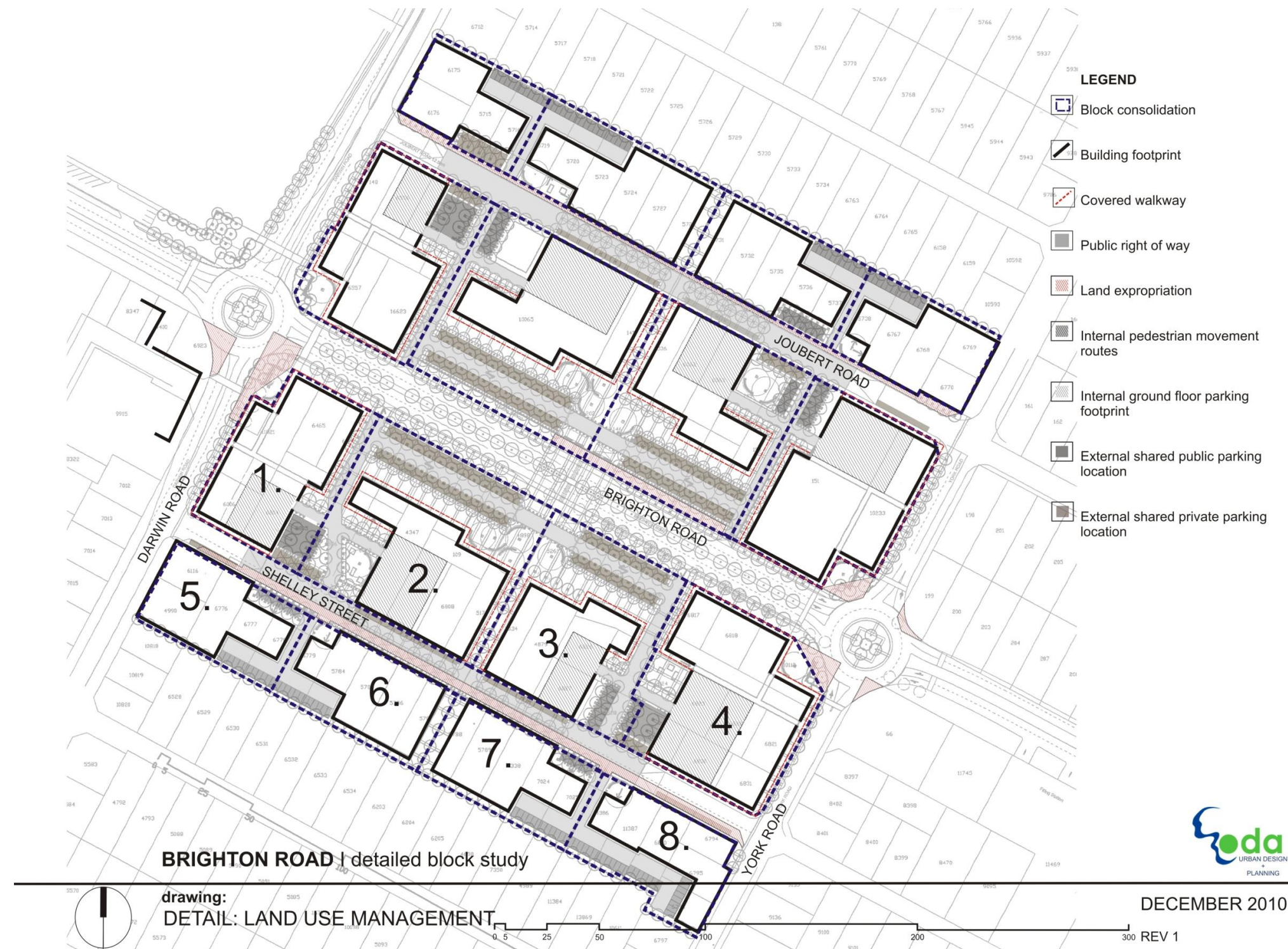
5.1 Land use management

The critical elements necessary to manage appropriate built form along Brighton Road are indicated in this plan which relate to ensuring that

- Erven are consolidated in the appropriate manner to ensure ongoing and unrestricted access between properties.
- The footprint of buildings to ensure that the courtyard model of development form is adhered to.

DETAIL BLOCK STUDY

- Covered pedestrian walkways are provided to ensure comfortable pedestrian environments
- Where unrestricted public access is required to ensure necessary access
- Location of shared parking spaces
- The location of land that will need to be expropriated in the future which gives certainty to future land owners.



5.2 Land uses

Mixed use development is to be supported along the route, with buildings reaching greatest height directly adjacent to Brighton Road and tapering back to the existing small scale residential fabric.

As indicated on the supporting plan, more public uses are located on the ground/ first floor along Brighton road linked to the shared multipurpose parking area.

Uses requiring more privacy are located along Shelley/ Joubert Roads to help minimise conflict.

It should be noted that in the consolidation of erven, access servitudes will be required to ensure equitable access

BLOCK DETAIL

	SIZE	FLOORS/ USE	COVERAGE	BULK
1	4595m2	5- M/U	70%	18 000m2
2	7844m2	5- M/U	40%	17 775m2
3	6172m2	5- M/U	40%	13 650m2
4	6180m2	5- M/U	70%	25 000m2
5	3058m2	3- RES	70%	6410m2
6	3262m2	3- RES	65%	6385m2
7	3262m2	3- RES	65%	6050m2
8	3218m2	3- RES	60%	5530m2

LAND USE BREAKDOWN:

Blocks 1-4= 35725m2

FLOOR	USE	SPLIT	UNITS
1	Commercial/ Business :	80%	20
	Internal Parking:	20.7%	
2	Commercial/ Business :	40%	30
	Internal parking :	60.7%	
3	Office	50%	70
	Residential	50%	25
4	Residential:	100%	50
5	Residential :	100%	50

Blocks 5-8= 8125m2

FLOOR	USE	SPLIT	UNITS
1	Residential	100%	15
2	Residential	100%	15
3	Residential	100%	15



5.4 Access management and parking

The concept for future growth and expansion along Brighton Road is framed by the future development of shared multipurpose parking courts in the front of buildings. This will require different building owners to negotiate access to these spaces. Mid- block pedestrian crossing points with IRT stops will also be integrated within the multipurpose spaces.

OURDOOR PARKING PROVISION:

Public parking	220 bays
Residents / guest parking (block1-4)	64 bays
Residents / guest parking (block5-8)	156 bays
Off-street parking	26 bays
TOTAL	466 bays

INDOOR PARKING PROVISION (block 1-4):

GROUND FLOOR	107 bays
FIRST FLOOR	320 bays
TOTAL	427 bays



5.3 Built Form and public open space system

The public environment is structured around a series of courtyard spaces that range in function, use and accessibility. The need for high quality open spaces is integral to the development of higher density housing and therefore needs to be properly planned for upfront.

Range of public spaces:

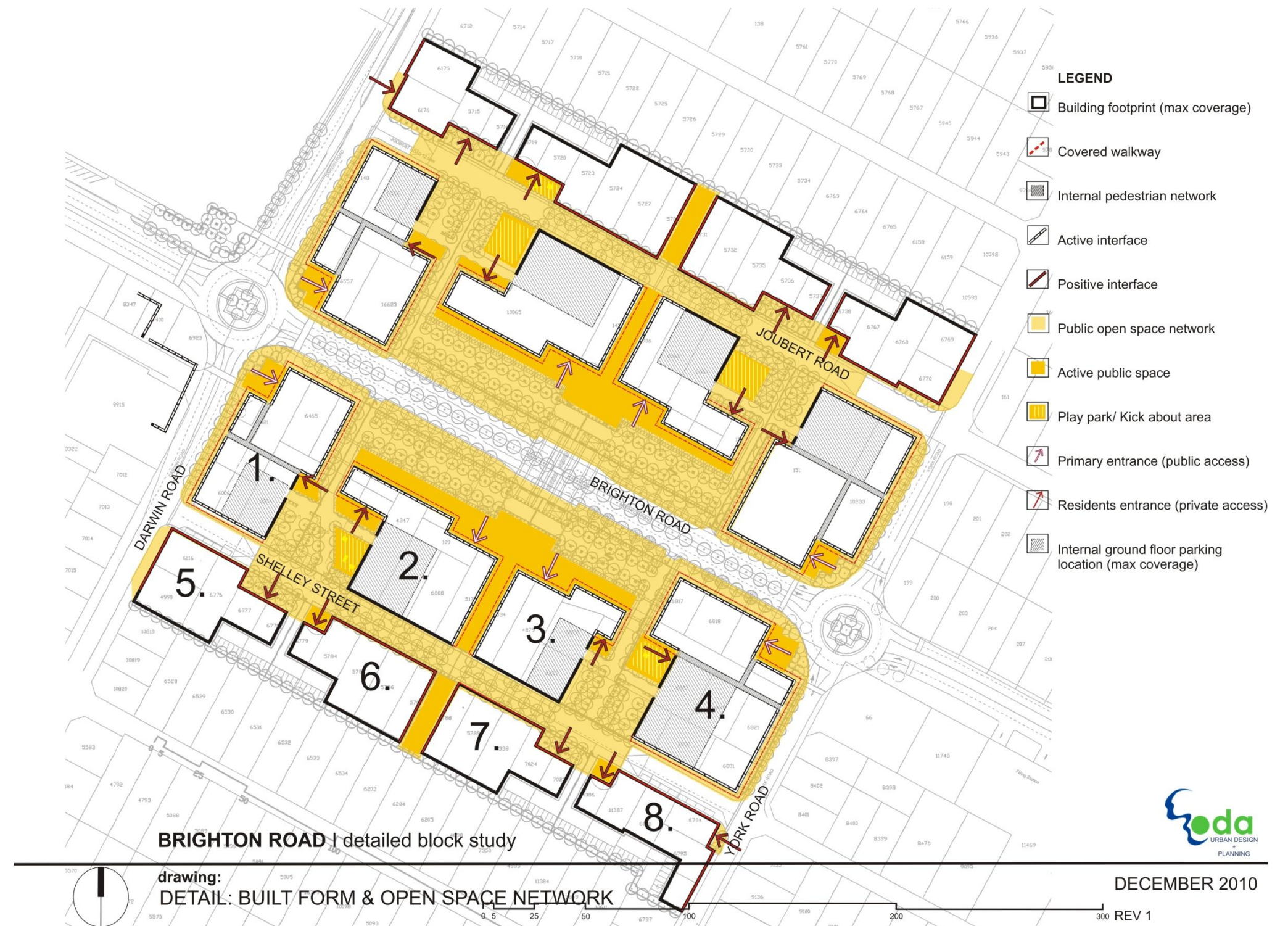
The character of the public environment is not uniform through-out the block. The more public activities are envisioned to occur adjacent to Brighton Road while the more private and residential activities will occur within the internal courtyard spaces provided and along Shelley/ Joubert Roads.

Interface conditions:

The location of main entrances has been indicated and should ideally be externalised to ensure activity within the public environment. The critical active building edges to support safe and inviting public spaces are also indicated. In all cases it is critical that appropriate ground floor uses that activate the public environment are located on primary pedestrian routes.

Covered walkways:

Covered walkways on the primary pedestrian movement routes are indicated to promote pedestrian comfort. The form of shelter ie- colonnade or attached canopy has not been specified, but the principle of giving shelter to pedestrian should be respected while individual building owners should give reference to neighbouring buildings in terms of the height, scale and form of adjacent walkways to ensure continuity of the street interface.



5.4 Character of the public environment

The proposed plan shows a significant emphasis on large scale tree planting. This will ensure that scale and a sense of place can be given to Brighton Road in the short term. In order to ensure continuity, it is critical that a continuous and co-ordinated material palette is adopted for all new public space investment. The proposed material palette is described below in the material .

6.1 Traffic circles:

In order to ensure that traffic circles are well integrated within their context. and do not dominate the spatial character of the overall BR route, where a boulevard character is being sought- it is proposed that they are treated similarly to the adjacent corner road spaces in terms of tree planting and surface materials. The building/ road corners should however be more dominant than the circle itself. Minimal tree planting is proposed in the circle to assist with creating a sense of enclosure while trees with slender trunks are proposed to ensure visibility within the circle.

6.2 Existing Yellowwood trees:

The position has been taken that all existing Yellowwood trees will be remain and where necessary transplanted to a new location in the immediate surrounds.

However Yellowwoods will not be continued to be planted along the BR route. All new tree planting along the Boulevard will be of a new tree type that is better suited to the harsh climatic conditions of the area but which has similar characteristics to the Yellowwood tree.



IMPLEMENTATION PLANS AND DESIGN GUIDELINES

6.1 Implementation mechanisms

The development of the long term vision and associated precinct plans has taken into account the possible instruments that can be used to influence change along the BR route. Some of these mechanisms can be actively driven by the City while others will require the City to respond appropriately when applications from private property owners emerge.

All the mechanisms will need to be applied in an integrated manner, to realise the proposed long term vision for the Brighton Road route.

IMPLEMENTATION MECHANISMS		
<i>proactive</i>		
Public land	Sale of public land for pilot/ demonstration projects	Public precinct
Capital budget	Planned & phased investment in public infrastructure	- Public space investment (inclu. NMT) - Tree planting
Developer contributions	Negotiated investment in public infrastructure in lieu of rezoning/ bulk/ height departures	- Public space investment - Tree planting - Road improvements
Phasing	Predetermined and agreed release of public land for sale and privately owned land for consolidation and rezoning	
<i>responsive</i>		
Land Use Management	Erf consolidation	- number and location of erven for consolidation - Appropriate ground floor usage and mix - Interface conditions - Parking location - Building location, footprint, setbacks and coverage - Investment in public environment
	Rezoning	- appropriate ground floor usage and mix - interface conditions, - parking location - building location, setbacks and coverage - investment in public environment
	Bulk and Height departures	- appropriate ground floor usage - interface conditions, - parking location - building location, setbacks and coverage - investment in public environment

6.2 Implementation plans- Land use management tools

For practical purposes, the following land use management plans illustrate the critical elements must be managed to realise the long term vision plan for the BR route. The principle of identifying the minimum or maximum criteria required to realise appropriate urban form has been applied. The following elements have been identified in each plan, size and location of possible erf consolidations, permissible building foot print and coverage, interface conditions, location of covered/ colonnaded edges and the location of at grade private and public parking. The implementation plan should be used together with the design guidelines provided in the next section.

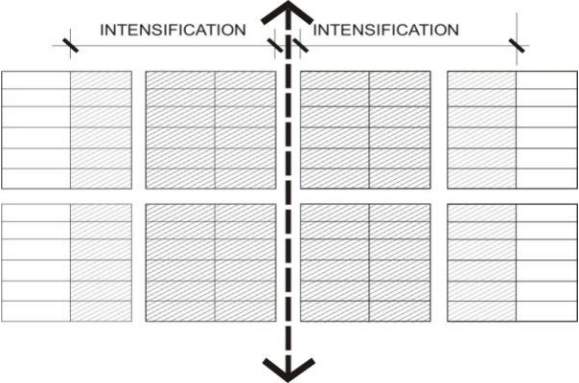
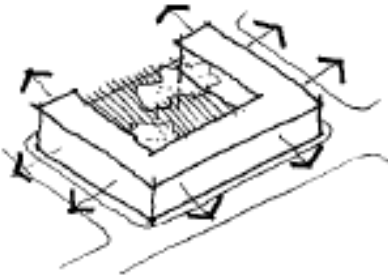
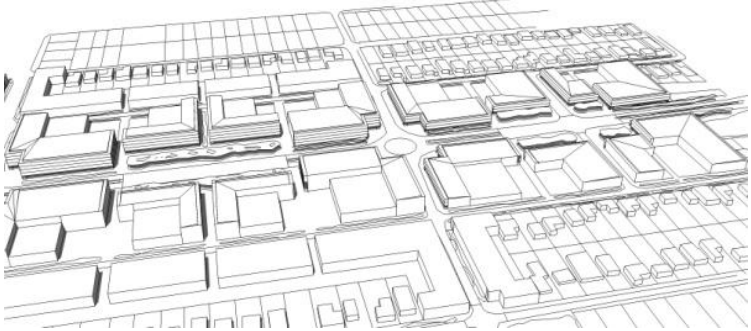
BRIGHTON ROAD- IMPLEMENTATION PLAN



VAN RIEBEECK STREET - IMPLEMENTATION PLAN

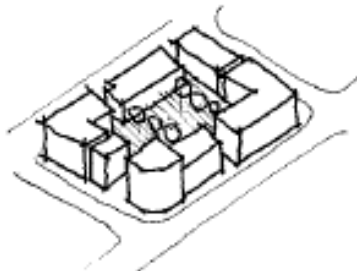
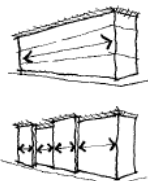
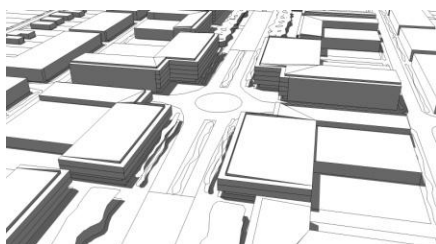
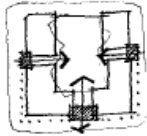


6.3 Design Guidelines

ERF CONSOLIDATION: To facilitate improved built form and the making of larger, multi-storey and mixed use development along the Brighton Road Route.		
• Guide & limit erf consolidation as per plan • Erf consolidation and rezoning applications within the overall development block to actively guide the location of public and private parking locations and designate new access routes with public servitudes • Erf consolidation to be limited to properties located on Brighton Road and Van Riebeeck street and to the first row of properties abutting the first parallel road running adjacent to Brighton Road and Van Riebeeck street. (1) • In general erf consolidation that facilitates intensification must end in the mid block to ensure sensitive transitions to the existing low rise/ low density residential fabric. (1) • Erf consolidation to promote perimeter development and courtyard building forms (2 &3) • Small blocks to be consolidated within a bigger development package in order to facilitate the sharing of parking and outdoor spaces (4)	EXAMPLE/ PRECEDENT	
	1.	2.
		
	3.	4.
		
	5.	6.

BUILT FORM:

Building design and form to promote positive relationships with the street through building location, ground floor usage, location of entrances and treatment of edges / interface conditions.

• The location of building footprints as per plan • Zero building setbacks expect where indicated on plans to be promoted.(3) • The consolidation of various buildings within a building block should not result in mega blocks with uniform detailing and scale. Buildings should collectively form an aggregate of smaller articulated components and range in scale and height. The overall block may vary in materials but windows and doors should have similar proportions.(1& 2) • Building articulation and window and door openings to all buildings should have vertical proportions (4a,4b,8& 9) • Existing buildings and architectural language, where appropriate should be preserved and translated into new building forms. • Balconies above the ground floor on multi-storey buildings to be promoted (8) • Projecting mono pitch roofs are to be promoted or parapet walls to roofs. (8 & 9) • Upper building storeys, 3rd floor and above should be designed to read as light weight elements to the overall building structure/ form. (9) • Main building entrances to be externalised and located on primary activity & pedestrian routes. (7a & 7b)) • Buildings on corners must step back to create a public forecourt area in front of the building. (5 &6)	EXAMPLE/ PRECEDENT					
	1. 		2. 		3. 	
	4.a 		4b. 		5. 	
	6. 		7a. 		7b. 	
	8. 		9. 			
	10.		11.		12.	
					13. 	

INTERFACE CONDITIONS:

Promoting open and active facades facing onto street edges to create safe and inviting streets and pedestrian environments.

PRIMARY STREET INTERFACE: Brighton Road, Van Riebeeck Street, Old Paarl Road

- Building setback: 0m setback except for parking courts (1)
- Covered walkways of 2.5 m to building edge required (2)
- Balconies required from the 1st floor and above (3)
- Active ground floor usage and facade. uses that 'spill' onto the street are to be encouraged. (4)
- No blank or inactive facades/ walls (5, 6a & 6b)
- No parking on ground floor to be located within 15m of primary activity street boundary. (6b)
- No entrances to parking garages on primary street edge (6b)

EXAMPLE/ PRECEDENT

1.



2.



3.



4.



5.



6a.



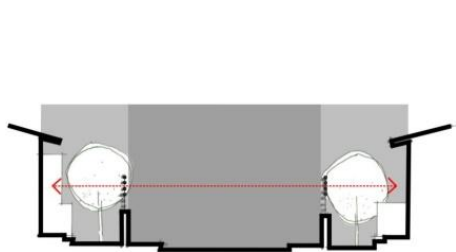
6b.



SECONDARY STREET INTERFACE: Darwin Road, York Road, 9th Avenue, Station Road

- Max 5m setback for street building edge
- Ground floor uses to be inviting and promote activity (4)
- Transitions from public to private spaces to be promoted with the use of low walls, level changes, raised verandahs and, shaded walkways (5 & 6)
- No blank boundary walls. (7a & 9a)) All boundary wall treatments to be visually permeable (7b)

7.



8.



9a.



9b.



PEDESTRIAN AND PEDESTRIAN PRIORITY ROUTES:

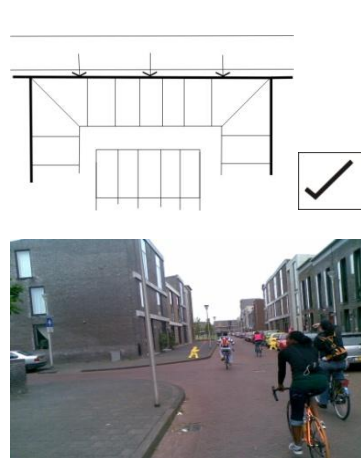
Tennyson Road, Shelly Street, Joubert Road, 11th Avenue, Wapnick Street, Church Street

- Buildings to have a positive relationship with the street (10 & 11)
- Streets to be designed to promote pedestrian activity. (10)
- Where possible, level changes to be minimised. (10)
- All boundary wall treatments to be visually permeable
- No blank boundary walls (12)

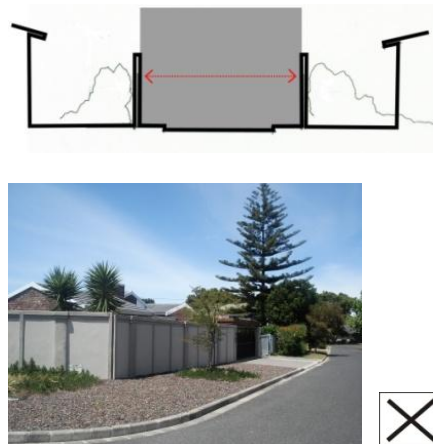
10.



11.



12.



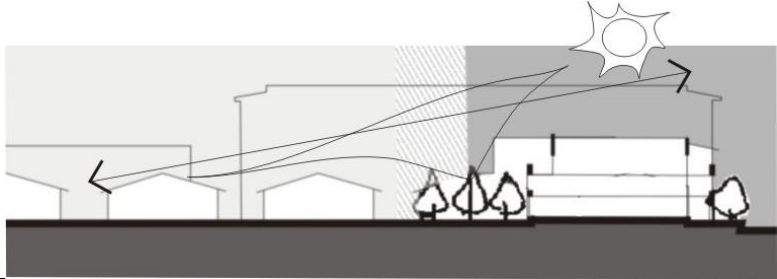
HEIGHT:

Greater height to be promoted to improve urban form, while limiting negative impacts to the surrounds.

- **Heights as per plan**
- Medium density to be achieved with a maximum of 5 storeys and minimum of 2 storeys. (2 & 4)
- Greatest height to be achieved directly on primary street edges and step down in height to form comfortable relation with existing fabric. (1.)
- A transition space between the existing residential fabric and new multi-storey development is required. This area can be used as parking with landscaping or as open space. (3.)
- Buildings that are more than 3 storeys need to set back 2.5m from the 3th floor. Upper building storeys should be designed to read as light weight elements to the overall building structure. (2.)

EXAMPLE/ PRECEDENT

1.



2.



3.



4.



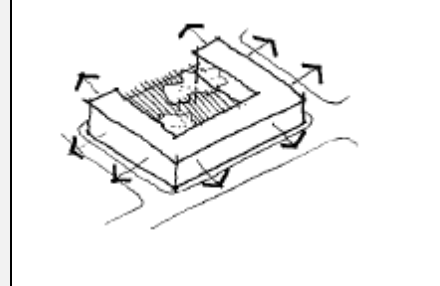
PARKING:

The location of parking must not sterilize or dominate the street experience.

- At-grade public parking areas to be located in shared multipurpose parking courts. These spaces must be landscaped and detailed to integrate with public spaces (2 & 4)
- At-grade private parking to be internalised and located within internal parking courtyards or on boundary edges facing onto existing residential housing where possible. These areas must be landscaped and must have visually permeable fencing.(1)
- No parking on ground floors to be located within 15m of primary activity street boundary. (3a & 3b))
- Parking within buildings should preferably be located below ground or above the first floor. (5)
- Entrances to parking garages should not be located on the primary activity street or pedestrian routes.
- Fenestration and detailing to parking garages should not change in relation to the rest of the overall building. It must have vertical proportions and integrate seamlessly.(5)

EXAMPLE/ PRECEDENT

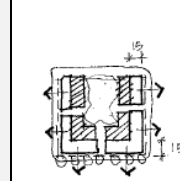
1.



2.



3a.



3b



4.



5.



PUBLIC SPACES AND STREETS:

Must be designed to increase legibility and identity along the BR route as well as encourage increased activity and public life.

- All public spaces should be designed as multipurpose spaces that can support a range of uses and activities (1 &2).
- Child friendly spaces to be designed for the internal courtyard areas (7 &8)
- Streets to be designed to promote outdoor activity (3.)
- Pedestrian lights, public seating, sculpture and, tree planting with irrigation is to be included in all public areas. (6)
- Internal 'road' spaces to integrate with public spaces through the use of similar paving materials. Pedestrian crossings to also integrate with public spaces through use of similar paving (1&4)
- Structured tree planting along the whole BR route required to improve legibility and identity.(5)
- Street tree planting and hard landscaping must be used to soften the impact of parking within public spaces.(1)
- Hard landscaping materials to make reference where possible to existing materials. A continuous and minimal material palette must be adopted.(6)
- Bicycle routes in public spaces must be integrated within the overall design.(9)

EXAMPLE/ PRECEDENT

1.



2.



3.



4.



5.



6.



7.



8.



9.



SOFT AND HARD LANDSCAPING

Indigenous and waterwise planting is to be promoted. All tree planting to have irrigation.

TREES

Focal trees:

- *Erythrina lysistemon* (Coral tree) (1)
- *Calodendrum capense* (Cape Chestnut) (2)

Primary street trees:

- *Podocarpus latifolius* (Yellowwood) – existing trees to be retained or relocated but not continued
- *Ekebergia capensis* (3) –fast growing, hardy tree that is similar in colouring and leaf texture to the Yellowwood.

Secondary street trees:

- *Acacia xanthoploea* (Fever Tree) (4) To be used on turning circles
- *Celtis sinensis* (5)
- *Schizolobium excelsum* (6) Alternative tree to be used on turning circles

EXAMPLE/ PRECEDENT

1.



2.



3.



4.



5.



6.

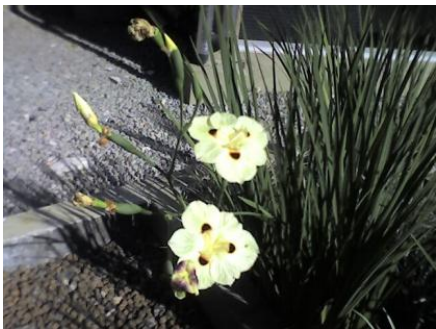


PLANTING

The following plants are recommended for corner planting areas at street cross sections with turning circles

- *Dietes bicolor* (7)
- *Dietes grandiflora*
- *Restio condrapetalum*
- *Plectranthus neochilus* (9)

7.

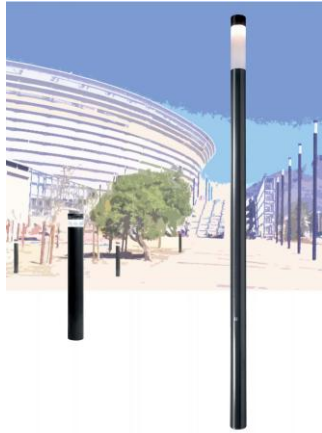


8.



9.



PAVING • Brick paving: Corobrick Dehoop brown/ Wheatstone (10, 11) • Aggregate pavers (11) • Dark grey cobbles for header courses (10) • Laterite (12) (to be used in turning circles only) • Asphalt	10. 	11. 	12.
STREET FURNITURE			
BENCHES: A range of seating options are recommended as per the precedent provided • Masonary seater walls with mosaic finishing (13: Kyuasa station) • Organic shaped timber benches (14, 16:Piers Place, Cape Town CBD) • Free standing stone or concrete benches (15: Heerengracht Street, Cape Town CBD) LIGHTING • Beka ‘Beacon’ street light or similar (13, 17) BOLLARDS • Beak ‘Torch’ bollard or similar. To be used mainly in public spaces (17) • Streetscape ‘Coldstram steel bollard or similar	13. 	14. 	15. 
	16. 	17. 	18.