

# **BACKGROUND INFORMATION DOCUMENT FOR CONSULTATION**

As a component of the  
Environmental Impact Assessment

Of the  
Proposed Extension of Walker Drive to the west to intercept with Cape Road and  
construction of the Redhouse Chelsea Arterial

For the  
Stakeholders and Interested and Affected Parties (IAPs)

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### **1. CONTACT NAMES AND ADDRESSES**

Interested and Affected Parties may contact the Environmental Consultants listed below for additional information or the Client, Nelson Mandela Bay Municipality, or the Project Managers BKS (PTY) LTD.

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### **2. BACKGROUND INFORMATION**

The proposed road development project will involve the construction of the Redhouse Chelsea Arterial in the vicinity of the N2 and linking this with the extension of Walker Drive. It is proposed that Walker Drive will be extended westwards to link with an existing road overpass on the N2 freeway. This bridge was constructed at the same time as the N2 freeway (1986) but was never connected to the metropolitan road network. A copy of the layout plan is attached to this document.

Terratest (PTY) LTD has been commissioned to undertake an environmental assessment for the proposed development. As part of this assessment, a Scoping exercise and Environmental Impact Assessment is being undertaken in accordance with Regulation 387 of 21 April 2006 in terms of Chapter 5 of the National Environmental Management Act (Act No. 107 of 1998). These regulations identify various activities which may have a substantial detrimental effect on the environment. In addition, the Regulations list procedures for assessing potential associated environmental impacts. Scoping forms part of the initial phase of these procedures.

### **3. PURPOSE OF THIS REPORT AND SCOPING**

This report provides preliminary project information to enable registered Interested and / or Affected Parties (IAP's) an opportunity to comment on the proposed development. All issues and comments raised by IAP's during scoping will be documented in the Scoping Report and Environmental Impact Report. This will assist with the identification of environmental issues that could have a negative and / or positive impact on the site and the community.

### **4. DEVELOPMENT PROPOSAL**

Road planning in the greater Port Elizabeth included for many years a north/south arterial (generally referred to as the Redhouse Chelsea Arterial) in the western part of the city from Stanford Road in Bethelsdorp, southwards through Hunters Retreat and past Sherwood to link with Kragga Kamma Road and eventually an extended Montmedy Road to the southwest of Lorraine. The Nelson Mandela Bay Municipality (NMBM) Integrated Transport Plan (ITP) includes the Redhouse Chelsea Arterial and parts of the road have been constructed at this stage – e.g. the section known as Bishops Way in the Hunters Retreat area. Allowance was made in the town planning scheme for the road reserve required for various sections of this road, also where it crosses the N2, and recent planning shows a revised alignment in the vicinity of the N2.

The provision of the Redhouse Chelsea Arterial in the ITP allows for the linking with an extended Walker Drive, which will be extended westwards to link with an existing road overpass on the N2 freeway.

#### **4.1 Location**

The access route and proposed interchanges with the N2 are located on the western perimeter of the Nelson Mandela Bay Metropolitan area adjacent to the Sherwood residential area. The proposed development is to include the planned Redhouse Chelsea Arterial alignment positioned within the original Redhouse Chelsea Arterial road reserve. It will eventually form a north/south link from Montmedy Road in the south to Stanford Road in Bethelsdorp.

The location of the interchanges was determined through historical developments. In the case of Walker Drive, the current overpass was constructed with the initial construction of the N2 in 1968 and a road reserve for a diamond interchange was determined at that time.

#### 4.2 Need and Desirability

The area on the western side of the Nelson Mandela Bay Metropolitan area, to the south of Rowallan Park and west of Sherwood, is available for development. Recent pressure from developers and land owners required the municipality to start formalising the road planning in this area. Structure plans for the development of the area have been proposed and these include more than 6000 residential opportunities as well as substantial business development. Note that these land uses have not been approved but it does however provide an indication of the development potential of the area under consideration. The land uses in the vicinity of the proposed Walker Drive interchange, as foreseen by Metroplan in 2006, include mostly residential 1 (medium to high density), but some mixed use and a regional shopping centre on the south eastern quadrant of the proposed interchange, are also envisaged.

A 2005 traffic investigation identified Kabega Road, Frikkie Kotze and Kragga Kamma Road, including Linton Interchange, to be reaching a low level of service and the traffic demand approaching capacity. Proposals were made for the upgrading and access management on these routes.

### 5. AFFECTED AREA

#### 5.1 Vegetation

The Nelson Mandela Metropole, incorporating Port Elizabeth, Uitenhage and Despatch, is situated in the southern-eastern most corner of the Cape Floristic Region (CFR), South Africa, and covers an area of 195 412 ha (1 954 km<sup>2</sup>) (Figure 1). The CFR is an area of exceptional floristic diversity and endemism (Cowling and Hilton-Taylor 1994). A conservation priority within the CFR is the lowlands of the Nelson Mandela Metropole. The Metropole is an area of convergence of five of South Africa's seven biomes; namely the Fynbos, Subtropical Thicket, Forest, Nama Karoo, and Grassland biomes (Low & Rebelo, 1998). Such a concentration of biomes, particularly within a city, is unparalleled in the world. The remaining natural habitats of the area are currently being severely fragmented by alien plant infestation, cultivation, grazing, mining and urban development. About 30% of the natural features of the Metropole have already been lost due to these processes.

Vegetation found in the area of the proposed development is dominated by Grassy fynbos, as identified by the Nelson Mandela Metropolitan Open Space System (NM MOSS) Project. The conservation status for this vegetation type is *Vulnerable*, meaning that it is an ecosystem which covers much of its original extent but further development could harm its health and functioning. The general rule for this Class III land is that it can withstand limited loss of area through disturbance or development.

An independent vegetation specialist will be appointed by the developer to identify endangered plant species that might occur in the area and a management plan will be put in place to reduce negative impacts that this proposed development might have on such plant species.

## 5.2 Climate

The climate of the study area can be described as moderate temperate. The Indian Ocean has a strong coastal influence upon the climate of the study area. Average annual rainfall for Port Elizabeth is 633mm per annum. Rainfall is spread throughout the year with a peak in late winter to spring. Across the study area, annual rainfall is likely to range between 350 – 700mm per annum. Temperatures range from an average of 15°C in the winter months to a summer average of 20°C. Temperatures are likely to increase as one travels inland since the Indian Ocean acts as a moderator in this regard.

## 6. KEY ISSUES

**Road Safety** – The extension of Walker Drive and construction of Redhouse Chelsea Arterial will increase the volume of traffic in the area and this may result in increases in vehicle speeds along the routes. This could endanger the lives of the residents (especially school children and the elderly), and traffic calming measures could be employed near schools, shops and churches (speed bumps, pedestrian crossings etc.).

**Increased Population, Permanent and Temporary** - The local economy and social perception (in terms of social upliftment) could be positively affected by construction activities and resulting developmental improvements. This will include improved social amenities and increased numbers of people in the area during and after construction, but may have a negative impact on the environment in terms of crime, sewerage, litter, erosion and vegetation clearance.

**Access to the Streams and Rivers** - Access to the streams and river areas by construction vehicles will cause damage to the fauna and flora associated with these systems. This will naturally alter water and soil characteristic and flow patterns, and must be prevented.

**Surface Water Runoff** - The construction activities will affect the area through changed hydrological patterns and may have an ecological impact. Permanent alteration of flow patterns is a risk and could lead to detrimental effects on the streams and rivers if these are not mitigated for during and after construction. Storm water management associated with hard surfaced roads should be designed into the road design and should take into consideration the erosion potential of the region.

**Rehabilitation** - A rehabilitation programme should be developed for all areas to be affected by the development. All alien plants could be removed and replaced with indigenous vegetation. The community should be made aware of the benefits of alien plant removal and vegetation rehabilitation. This could be an on going process and should not be left to the end of the projected construction period.

**Vegetation Clearance** - Where required, vegetation should not be cleared all at once, but should be phased, in order to reduce soil erosion and the proliferation of exotic weeds. Weeds will thrive on disturbed soil, and will present an eradication problem later should these plants set seed, especially near the watercourses. Indigenous plants that might require removal during the construction phase must be relocated to a municipal nursery and then replanted at the site of the proposed development after the completion of the works.

**Erosion** - Potential erosion should always be considered during and after construction activities. If strict mitigation measures are implemented these can be prevented / reduced. These include soil stabilisation and re-vegetation of affected areas as well as avoidance (during construction and operation) of all areas susceptible to (or presently experiencing) erosion.

**Natural Resource Over-Exploitation** - As with any development, increased pressure is placed upon the natural resource base to meet human consumption demands from an increased population. For example, the construction workers may harvest firewood, food and medical plants in the area, beyond sustainable limits, or beyond the current impact. This must be prevented.

**The Opportunities Created** - This proposed development will create opportunities that are likely to outweigh the negative impacts, but only if properly managed and mitigated for, and if the development follows the design recommendations and building constraints (especially in terms of public safety and erosion prevention measures).