APPENDIX K NEEDS AND DESIRABILITY

The City of Cape Town (CCT) proposes to upgrade the intersection of Baden Powell Drive, Macassar and Japhta K Masemola Roads, located at the eastern edge of Khayelitsha (the proposed project). The proposed project entails a conversion of the existing stop-controlled intersection to a roundabout. Baden Powel Drive has priority flow, and the traffic circle is intended reduce the delay experienced by current and future development traffic approaching from Japhta K Masemola and Macassar Roads and allow for safer right turn and crossing manoeuvres at this intersection.

The project is being undertaken on behalf of the City of Cape Town in support of the Macassar Housing Development. A Transport Impact Assessment (ITS Engineers, 2012) was undertaken as part of the Macassar Housing Project, which identified that the Baden Powell / Macassar Road intersection is expected to operate over capacity during the afternoon peak hour. A traffic circle was proposed to alleviate the expected congestion and improve traffic flow at the intersection.

The existing intersection at Baden Powell Drive, Macassar Road and Japhta K Masemola Road currently experiences congestion during peak periods, delays for public transport and emergency vehicles, and safety risks associated with right-turn and crossing movements. The intersection also presents safety challenges for pedestrians and other non-motorised transport (NMT) users attempting to cross Baden Powell Drive. The proposed conversion of the existing stop-controlled intersection to a traffic circle is considered an appropriate and efficient intervention to address these constraints.

Traffic circles allow vehicles to yield and proceed when safe, thereby reducing unnecessary stopping and delays during off-peak periods compared to signalised intersections. This results in improved traffic flow, reduced vehicle idling, and more reliable travel times. Traffic circles also improve road safety by lowering vehicle speeds and reducing high-risk conflict points associated with right-turn movements. In addition, traffic circles provide a more resilient and lower-maintenance traffic control system than signalised intersections, as they are not dependent on electrical infrastructure that may be susceptible to vandalism, theft or power outages.

The proposed upgrade therefore supports the efficient movement of traffic along Baden Powell Drive, a key regional transport corridor connecting surrounding communities and economic nodes. The improvement is particularly important in accommodating anticipated increases in traffic associated with the Macassar Housing Development and surrounding urban growth.

The proposed development further advances the strategic objectives of the National Development Plan 2030, the Western Cape Provincial Spatial Development Framework, the City

of Cape Town Integrated Development Plan 2022–2027, and the City of Cape Town Comprehensive Integrated Transport Plan. It also aligns with the Integrated Spatial Development Framework for Khayelitsha, Mitchells Plain and Blue Downs (2023), which promotes spatial transformation by containing development within the urban edge, supporting higher-density development along key transport corridors, and enabling a viable and sustainable public transport system.

By improving intersection capacity, enhancing road safety, and supporting efficient mobility for private vehicles, public transport, and non-motorised users, the proposed traffic circle contributes to reducing travel times and improving access to employment, services, and economic opportunities for surrounding communities.