# BASIC ASSESSMENT REPORT

NOTIFICATION OF PUBLIC PARTICIPATION PROCESS AND AVAILABILITY OF THE DRAFT BASIC ASSESSMENT REPORT FOR PUBLIC REVIEW AND COMMENT AS PART OF THE BASIC ASSESSMENT PROCESS FOR THE PROPOSED IRT PHASE 2A TRUNK ROUTE SECTION W8- PROPOSED EXPANSION OF THE ROAD AND DEVELOPMENT OF DEDICATED BUS AND NMT LANES AND ASSOCIATED INFRASTRUCTURE BETWEEN SOUTH ROAD AND THE M5 INTERCHANGE – WYNBERG, PLUMSTEAD & YOUNGSFIELD.



# Compiled by:

**Chand Consultants** 

Block A. Plum Park

4 St Clair Road

**Plumstead** 

7800

www.chand.co.za





Department of Environmental Affairs and Development Planning

# **BASIC ASSESSMENT REPORT**

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

**APRIL 2024** 



# **BASIC ASSESSMENT REPORT**

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

## **APRIL 2024**

(For official us	se only)
Pre-application Reference Number (if applicable):	
EIA Application Reference Number:	
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

# **GENERAL PROJECT DESCRIPTION**

(This must Include an overview of the project including the Farm name/Portion/Erf number)

T PHASE 2A TRUNK ROUTE SECTION W8- PROPOSED EXPANSION OF THE ROAD AND DEVELOPMENT OF DEDICATED BUS AND NMT LANES AND ASSOCIATED INFRASTRUCTURE BETWEEN THE M5 INTERCHANGE AND MAIN ROAD – WYNBERG, PLUMSTEAD & YOUNGSFIELD.

**DEA&DP NOI REFERENCE NUMBER:** 16/3/3/6/7/1/A6/96/2194/23 **HWC REFERENCE:** 22100303CN1004

**CHAND REFERENCE: IRT-W8** 

# **Executive Summary**

The Metro South East South Road Scheme (known as the IRT W8) is a critical component in completing the Wynberg leg of the IRT Phase 2A corridor, linking the M5 Kromboom Parkway in the east to the M4 Main Road in the west. It is situated between two approved IRT Phase 2A work packages—W5 (M68 Ottery Road) to the east and W6 (Wynberg Couplet) to the west. The scheme has been under independent consideration as part of the City of Cape Town's broader road upgrade initiatives since before the IRT was conceptualized.

The Lansdowne-Wetton Corridor (LWC) road scheme was originally approved by Council in October 2011 as part of the broader planning and design approval for IRT Phase 2. A route alignment options analysis for the Wynberg leg of the LWC trunk route was completed in 2014, and its findings were incorporated into the approved 2032 IPTN plan in June 2014. Public participation with affected communities was conducted between October 2014 and July 2015. However, prior to the commencement of this process, City tenants of South Road CCT owned properties that overlap the IRT W8 construction corridor were issued termination notices, prompting the Wynberg Residents' & Ratepayers Association (WRRA) and the South Road Families Association (SRFA) to file an urgent application with the Western Cape High Court on 26 March 2015. The court ruled in favour of WRRA and SRFA on several key issues, particularly emphasizing the City of Cape Town's obligation to conduct meaningful public participation for Phase 2A. As a result, all work on South Road was suspended on 1 April 2016. The City appealed the High Court ruling, and on 10 February 2017, the appeal was upheld in favour of the City. To address concerns raised, the City commissioned a peer review of the Wynberg leg's routing options, conducted by PricewaterhouseCoopers. Following various assessments and reports, the Council approved the Ottery/South Road alignment on 28 March 2019. This alignment was recommended based on its ability to meet BRT needs while addressing road network deficiencies and minimizing property acquisitions compared to the Wetton Road alternative.

From a strategic road network perspective, the proposed development is essential for establishing a critical east-west connection in the southern Wynberg area and across the railway line, ensuring continuity with the proclaimed South/Constantia Road link west of Main Road. This road link is required independently of the IRT trunk alignment.

This text provides an executive summary for the Basic Assessment Report (BAR) for the IRT Phase 2A Trunk Route Section W8 of the Proposed Expansion of The Road And Development Of Dedicated Bus And NMT Lanes And Associated Infrastructure Between Main Road and the M5 Interchange within the suburbs of Wynberg, Plumstead and Youngsfield.

This application for Environmental Authorisation is limited to Work Package W8 of the larger MSEC project, which would connect Wynberg Main Road in the west to the M5 Interchange in the east, via South Road.

Application has been made to the Department of Environmental Affairs & Development Planning (DEDA&DP) for Environmental Authorisation and this document is currently being subjected to a 30-day public review period. All comments raised in relation to the Draft BAR will be considered, and where appropriate, changes will be incorporated into the Final BAR for submission to the competent authority (the DEA&DP) for their final decision-making. Note that while I&AP contact information is not disclosed as part of this report, all contact details of I&APs will be included in the final BAR to the DEA&DP and will become part of the public record.

The most pertinent details regarding the environmental process are captured in this executive summary. Full details are provided in the rest of the Draft BAR and the Appendices, which, inter alia, contains the full specialist reports.

### **PROJECT DESCRIPTION**

The proposed scope includes the following:

- The existing section of South Road would be extended westwards by ±265m in order to connect to Wynberg
  Main Road via a newly constructed bridge over the railway line and Waterbury Road.
- The intersection between Prince George Drive, Rosmead Avenue, Ottery Road and South Road would be realigned and upgraded/widened.
- Sections of Wynberg Main Road, Prince George Drive, Ottery Road, Rosmead Avenue and Pluto Road will also be upgraded / widened.
- The inclusion of two dedicated bus lanes and additional vehicular use lanes along the entire route.
- New bus station located at the Pluto Road intersection;;
- Provision of improved non-motorised transport (NMT) routes;
- Development of a bridge to cross the railway line (Figure 4 and Figure 5);
- A road shoulder;
- Parking areas;
- Hard and soft landscaping using indigenous plant species and retaining , where possible, existing trees.
- Service infrastructure:
  - Stormwater interventions on site will cater for the minor (1:5 year) and major (1:10 year) storm recurrence return periods and will entail a network of concrete collector pipes, new catchpits, and the relocation of existing catchpits and manholes, all of which will integrate with the existing stormwater infrastructure.
  - The existing street lighting along the proposed roadway will be removed and replaced with new infrastructure.
  - A range of overhead and underground services (electrical, water, sewage, stormwater, telecommunication) are present within the site boundary. Accordingly, appropriate provisions must be made for the removal, relocation, upgrade (where necessary) or protection of existing infrastructure, including electrical, telecommunication, water, and sewer services. These will however all be within the development footprint being applied for or within existing road reserves.

None of the proposed service infrastructure (pipelines, transmission lines etc.) meet the thresholds considered in the respective Listed Activities.

The typical cross section for the route will comprise a 3.5m bus lane, 3.4m general traffic lane and 1.5m shoulder on either side. The NMT is made up of a 2m wide sidewalk and 1.8m wide dedicated cycle lane on both sides. The route and road extent are depicted in **Figure 1** above. Site Plans are included in **Appendix B1** and **Appendix N** for the draft Landscaping Plan of the Basic Assessment Report.

The proposal will necessitate:

- Acquisition of approximately 22 privately owned properties along the route;
- Demolition of a number of existing structures;
- The permanent or partial closure of certain roads / intersections for vehicles.

### **Encroachment into Public Open Spaces**

Approximately thirty five Public Open Spaces (OS2) would be encroached upon by proposed road widening and associated activities. These areas have a split zoning of OS2 and Transport 2 as they have long been earmarked for this road upgrade. The affected properties will be encroached upon by > 4m.

Note that an envelope/development footprint is being applied for with variations of the cross-sections to be designed during the detail design phase. It is believed that considering a development envelope is appropriate for this proposed development (essentially expansion of a road) as the land use (i.e., a road) remains consistent throughout the extent of the footprint

#### **LEGISLATION**

With respect to the National Environmental Management Act (No. 107 of 1998), as amended (NEMA) and association Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) and associated Listed Activities, the following aspects of the proposed development are important:

### Listing Notice 3 - Activity 4

The proposed road upgrade activities described above will also result in encroachment into properties zoned as Public Open Space (POS). The South Road extension ("New South Road") which would run parallel to Waterbury Road is considered new roadway with a reserve ranging between 32 – 40m in width. This section of new road will encroach into properties with a dual zoning of OS2 and Transport 2.

### Listing Notice 3 - Activity 18

The affected roads will be widened by more than 4 m, into some properties which have a split zoning for transport as well as Public Open Space.

In terms of the National Water Act, 1998 (Act No. 36 of 1998), no watercourses are located within 100m of the proposed development. Additionally, no natural wetlands are impacted within 500m of the development. With respect to the National Environmental Management: Waste Act, 2004 (Act No. 59 of 2008), the proposed development is not anticipated to trigger any waste management activities. Similarly in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), the proposed development is not anticipated to generate any emissions triggers.

### **ALTERNATIVES**

In terms of the assessment of site and activity alternatives, the proposed development forms part of a much wider IRT system that the City of Cape Town is rolling out throughout the City. This particular portion of the route triggers the need for Environmental Authorisation, however most of the entire network does not.

From a strategic road network perspective, the proposed development is essential for establishing a critical east-west connection in the southern Wynberg area and across the railway line, ensuring continuity with the proclaimed South/Constantia Road link west of Main Road. This road link is required independently of the IRT trunk alignment.

Given that preceding studies have thoroughly considered route alternatives, and already determined the most appropriate route, no further route alternatives were assessed as part of this Basic Assessment process.

This assessment considered two design alternatives. The preferred design alternative (Alternative 1) includes the construction and development of a rail overpass (bridge) that links South Road to Waterbury Road. The proposed vertical alignment ascends, shortly after the Main Road intersection at roughly 4.7% to form a crossing over the existing railway line. Thereafter it descends at roughly 6.4%. The vertical design at this section was limited to a design speed of 60km/h to reduce the span of the bridge as well as to tie back to ground levels at a suitable location.

### Preferred Alternative (Overpass)

The motivation for selecting the overpass design over the underpass design is based on several key environmental, technical, and safety considerations that align with the objectives of minimizing impacts on the surrounding environment and ensuring the long-term viability of the infrastructure.

The preferred alternative maximises on design potential. Provision of the largest cross-section possible enables the delivery of the best possible product and service to the community in the form of a useful and valuable network for public transport. The road needs to accommodate normal vehicular traffic as well as the IRT buses such that traffic flow remains smooth and that those buses, ideally, have their own lanes. This can be achieved with Alternative 1. From a biophysical perspective, there are no sensitive areas along the surface of the route which would have to be avoided which further supports the preferred layout alternative.

It is acknowledged that, for those in the vicinity of the railway crossing, Alternative 2 (underpass) may be more visually acceptable if compared to the preferred Alternative 1. However, the overpass structure offers substantial benefits in terms of minimizing continual groundwater and soil disruption. During geotechnical investigations, it was determined that the location has a relatively shallow water table, which would require a robust and costly subsoil system for managing groundwater if an underpass were to be considered. Continuous groundwater pumping would be required to keep the underpass dry, which would be both operationally demanding and expensive to maintain over time. In contrast, the overpass avoids this groundwater management issues, offering a more sustainable, cost-effective and viable solution in the long term.

Furthermore, the continuous operation of a pump generator to manage groundwater presents significant environmental and security challenges. Continuous operation of a pump generator would lead to ongoing emissions, primarily carbon dioxide (CO2), if powered by fossil fuels. This contributes to climate change by increasing the carbon footprint of the project. The constant running of generators also places a strain on energy resources. As efforts are being made worldwide to reduce emissions and shift towards more sustainable practices, the reliance on such energy-intensive methods becomes increasingly counterproductive in terms of environmental goals.

Homeless individuals may seek shelter in an underpass, particularly in areas where the environment is more sheltered and protected from the elements. While this may offer temporary relief to the individuals, it creates security concerns for the surrounding community. The presence of vagrants in the area could lead to risks such as theft, vandalism, or even accidents, especially if the underpass is not properly monitored.

Addressing these challenges requires a balance between social and environmental responsibility, energy efficiency, and ensuring the security of infrastructure in a way that is both sustainable and safe for all parties involved.

Overall, the overpass option provides a more practical, cost-effective, environmentally friendly and safer solution, aligning with sustainable development principles and minimizing the need for extensive maintenance and management measures.

## Alternative 2 (Underpass)

As an alternative, the other design (Alternative 2) proposes the construction of an underpass beneath the Southern Railway line, linking South Road on the east of the existing railway with Waterbury Road on the west. The underpass will entail a jacked structure beneath the railway line with extensive retaining walls (lateral support) to facilitate the underpass within the available road reserve corridor on either side.

The preliminary geotechnical investigation found that the shallow, perched groundwater table at the site presented significant constraints to the proposed development (HHO Consulting Engineers, 2024). These included:

- Continuous ingress of perched groundwater and associated slumping of the saturated sands for excavation
  exceeding about 1.5m depth, undermining any battered sidewalls above and requiring groundwater lowering
  or temporary lateral support including groundwater control/drainage through dewatering;
- The need for piled foundations for heavier structures and/or structures with limited tolerance for settlement;
- De-watering of large volumes of groundwater for laterally supported excavations, particularly on the western side of the railway line, which could also impact neighbouring properties; and
- Potential for chemical attack and/or corrosion of concrete due to the moderately to highly aggressive groundwater conditions. Managing the groundwater would necessitate a robust subsoil system with continuous pumping, making it highly complex and costly to maintain (HHO Consulting Engineers, 2024).
- As a result, the design and continuous maintenance requirements for Alternative 2 (underpass) rendered it technically and financially unfeasible, and hence, not preferred.

### **No-Go Alternative**

The no-go alternative entails maintaining the current state of relevant sections of the route (Ottery Road, South Road, Waterbury Road, and Main Road), without implementing the IRT network or constructing an overpass bridge. This means these areas would remain unchanged from their existing condition.

This alternative is deemed not preferred as the proposed development plays a pivotal role within the larger planned IRT Phase 2A system, which is integral to spatial planning of the greater area and enhancing public transport connections across the metropole, linking the eastern and western parts of the City. Without the proposed development, this strategic plan would be severely compromised, affecting accessibility, socio-economic opportunities for local communities, and the City of Cape Town's strategic objectives for connectivity as outlined in the MSDF.

# **BASELINE ENVIRONMENT**

## Geology

A geotechnical investigation conducted by HHO Consulting Engineers assessed the site's geological conditions, confirming that it is predominantly covered by Quaternary-age sandy soils. The engineering geological mapping classifies the site as having medium suburban development potential, with considerations for consolidation, wind erosion, and soil permeability. The anticipated cost implications for development are low.

Borehole drilling revealed a typical soil profile consisting of topsoil (0.5m-1.2m thick), underlain by transported colluvial soils (3.0m-12.5m deep), followed by residual granite. Transported soils generally extend to 3.0m-6.0m in depth, but in the western section, near the railway line, they extend significantly deeper (9.3m-12.5m). The residual granite soils beneath these layers

are composed of silty clay with quartz gravels. The findings provide critical insights for foundation design, highlighting the need for appropriate geotechnical considerations in the development process.

#### Groundwater

The proposed site is situated within the Cape Peninsula and Cape Flats Strategic Water Source Area (SWSA), a critical groundwater resource. According to the Department of Water and Sanitation (DWS) and Cape Farm Mapper, the underlying aquifer consists of a Major Intergranular Aquifer to the east of the railway line and a Fractured and Intergranular Aquifer to the west, with groundwater yields ranging from 0.1–0.5 l/s in the east to 0.0–0.1 l/s in the west. The aquifer is highly vulnerable and exhibits a significant susceptibility to fluctuations in groundwater quality and levels.

Geotechnical investigations (**Appendix G8**) confirm the presence of a perched groundwater table at depths ranging between 1.5m and 3.0m, varying seasonally. This perched aquifer forms due to the infiltration and lateral migration of surface and near-surface water within the permeable sandy transported soils, which are underlain by impermeable residual granite clay. Consequently, the subsurface sand between approximately 1.5m and 2.5m is saturated, leading to continuous groundwater ingress into excavations deeper than 1.5m.

#### **Surface Water**

The site is located within the Table Mountain Strategic Water Source Area (SWSA) for surface water and falls within the Berg-Olifants Water Management Area (WMA), specifically in quaternary catchment G22D. There are no natural surface water resources within or traversing the site footprint (NCC, 2023b). Additionally, no fish support areas, fish sanctuaries, translocation areas, migration corridors, rehabilitation zones, wetland clusters, high water yield areas, or free-flowing rivers are present on-site.

The nearest aquatic feature, the Diep River, is located over 900m to the west and southwest of the site's western boundary. While several artificial and natural NFEPA and NWM5 wetlands exist in the broader area, none fall within the NEMA-regulated buffer for wetlands or watercourses. One NFEPA wetland, situated on the Royal Cape Golf Club, is located just within 500m of the site boundary; however, its distance from the development precludes any significant impact on the watercourse (NCC, 2023b).

The site has undergone extensive transformation and is highly modified, resulting in limited ecological connectivity between surface water resources (NCC, 2023b). As a result, the overall aquatic biodiversity sensitivity of the site has been assessed as Low (NCC, 2023b).

#### **Terrestrial Biodiversity**

The National Web-based Environmental Screening Tool identifies the site as having a "Very High" terrestrial biodiversity sensitivity. Consequently, a site sensitivity inspection was conducted by NCC Environmental Services in August 2023 to verify this classification (refer to **Appendix G6** for the full compliance statement). Analysis of aerial satellite imagery indicates that the site and its surrounding urban landscape have remained largely unchanged since 2002, with minimal vegetation or natural features present. This suggests a prolonged period of ecological degradation, rendering the area unsuitable for sustaining natural fauna and flora (NCC, 2023a).

The site is not located within any Critical Biodiversity Areas (CBA), Ecological Support Areas (ESA), or other conservation-priority areas under biodiversity planning frameworks. Additionally, it is not within any Protected Areas as defined by NEMA, CapeNature, or SANBI. While historically part of the Cape Flats Sand Fynbos biome, a critically endangered vegetation type, the ground-truthing assessment confirmed that the site has been extensively transformed, lacking any indigenous plant communities (NCC, 2023a).

The habitat has been significantly degraded due to anthropogenic factors such as fragmentation, trampling, invasive plant proliferation, municipal service management, and the suppression of natural ecological processes like fire. Existing vegetation consists predominantly of planted grass species and both indigenous and exotic landscaping species (e.g., Ficus rubiginosa, Kiggelaria africana, Syagrus romanzoffiana, Melia azedarach, and Searsia pendulina), which inhibit the regeneration of native flora. Due to the degraded habitat quality, no plant species of conservation concern were found or are expected to persist under current conditions (NCC, 2023a).

Similarly, no faunal species of conservation concern were observed, nor does the site provide suitable habitat to support such species. The absence of essential ecological drivers such as wildlife corridors, forage, and shelter, combined with habitat fragmentation and exotic species dominance, further reinforces the site's classification as having 'Low' terrestrial biodiversity sensitivity (NCC, 2023a).

# **Geographical Aspects**

There were no significant geographical aspects to take into account. The selection of the proposed route's location has been guided by the systems planning team of the City of Cape Town, specifically identified as conducive for supporting the east west movement across the metropole through the implementation of the Integrated Rapid Transit (IRT) network, as detailed in the Cape Town Metropolitan Spatial Development Framework (CTMSDF). This strategic choice aims to enhance accessibility for local communities and businesses to various employment centres and development nodes.

## **Visual Aspects**

Upon an investigation of the visual impact of the proposed development, Gibbs (2024) determined that it will have both direct and indirect effects on the site and the local area, significantly altering the urban fabric and character of South Road. The demolition of existing buildings will further erode the urban fabric, and the introduction of the rail overpass bridge will intrude visually and overshadow adjacent properties. Additionally, the closure of several neighbourhood streets will disrupt the north-south continuity of the neighbourhoods and divide Wynberg / Wittebome from Plumstead.

The site is located in an area of moderate to high scenic, cultural, and historical significance, featuring valued characteristics such as mountain views, community facilities like churches and schools, and numerous heritage buildings (Gibbs, 2024). The surrounding environment is recognized for its urban residential character and strong sense of place, with moderate to high visual amenity. However, parts of the site have low visual and landscape amenity due to the demolition of buildings.

While the urban design report suggests mitigation measures through various urban landscape interventions, these will fundamentally transform South Road. The street will shift from a relatively quiet residential area with an intact streetscape on the northern edge and informal open space on the southern edge into a high-capacity "complete street" with increased cross-sectional area, additional lanes, and higher traffic volumes and speeds.

The landscape character of the local context is considered highly sensitive, due to its proximity to the proposed development. The properties immediately adjacent will be most severely impacted by the visual intrusion of large-scale traffic infrastructure, particularly the rail-overpass bridge, as well as the disruption to the continuity of neighbouring areas (Wynberg / Wittebome and Plumstead).

Although the proposed development aims to improve metropolitan-scale connectivity between the metro-south and Wynberg, it comes at the cost of local-scale disconnection and displacement. Beyond the visual and spatial disruptions, additional negative impacts include increased noise and air pollution due to higher traffic flows. Given the scale and significance of these impacts, a meaningful exploration of alternative routes will be necessary, as mitigation alone is unlikely to reduce the adverse effects to an acceptable level.

### Impacts upon the Regional Context:

• Where perceived from the site and immediate adjacencies, the proposal is likely to impact upon background views of the geographic landmark features by intruding into the foreground and obscuring the mountain background.

### <u>Impacts upon the Local Context:</u>

 Visual disruption to the urban fabric and visual intrusion of large-scale traffic infrastructure (most notably the railoverpass bridge), with disruption to the continuity of adjacent neighbourhoods (Wynberg / Wittebome and Plumstead) by limiting north-south connectivity.

#### Impacts upon the Site Attributes:

• Demolition of existing buildings (including some Grade 3 heritage resources) as well as local landmarks (such as 'Mallow' at the western / Main Road interface, and Abdullah's Food centre at the eastern portion; the removal of some mature trees, the visual intrusion of the rail overpass bridge, with columns, ramps, stairs overshadowing adjacent properties; the impact of noise and air pollution as a result of additional traffic reducing the environmental and spatial quality of the adjacent properties.

In the case of the proposed development, these cumulative effects could significantly alter the character and functionality of the local area. One major concern is the increase in traffic speed and volume, which will likely compromise pedestrian safety, particularly for school children walking to and from the numerous schools in the vicinity. The intensified traffic flow may also introduce higher levels of noise and air pollution, further degrading the residential environment. Beyond the immediate traffic-related concerns, the scale of the proposed infrastructure is more aligned with commercial or even light industrial land uses. This could catalyze further shifts in the area's land use, leading to the gradual displacement of the residential fabric. Over time, this process of intensification may erode the neighbourhood's existing sense of place, transforming it from a relatively quiet, residential environment into a more commercialized and high-traffic corridor.

Gibbs (2024) further notes that the negative impacts of the proposed development include the imposition of massive infrastructure upon a quiet residential street, the disruption of the urban fabric, and the loss of urban green spaces. Even though the specialist noted that the implementation of the proposed landscape response and urban design interventions as mitigation, may produce positive impacts in terms of urban placemaking, the proposed project is not supported.

Recommended implementable mitigation and remedial measures are provided in **Section 12** and detailed in the Environmental Management Programme (EMPr) in **Appendix H**.

- and PM peak hours.
- The future (2040) Rosmead Avenue / Ottery Road intersection will operate at a high level of service (LOS B), indicating low delays, in the AM and PM peak hours.
- In the future (2040), Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection will operate at a low level of service (LOS E) in the AM peak hour and at an acceptable level of service (LOS C) in the PM peak hour.
- In the future (2040), the dedicated BRT lane approaches at the Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection will operate at a reasonable level of service (LOS C) in the AM and PM peak hours.
- In the future (2040), the short queue jump southbound left turn bus lane will operate at a reasonable level of service (LOS C) in the AM peak hour and at an acceptable level of service LOS D in the PM peak hour.

• The queue lengths between the two closely spaced intersections i.e., north approach of the South Road / Romead Avenue / Prince George Drive intersection and south approach of the Rosmead Avenue / Ottery Road intersection, will not exceed the 60m storage length in the (2040) AM and PM peak hours.

#### Access Management

The proposed South Road / Chudleigh Road LILO access meets the minimum access spacing requirements.

#### **Parking**

There is currently no formal parking provided along South Road. However additional parking areas is proposed as part of the Work Package W8 design.

#### **SUMMARY OF IMPACTS**

The Basic Assessment was aimed at identifying and assessing all significant impacts associated with the proposal. The study revealed that:

- Aquatic and terrestrial biodiversity: no constraints to the development with the specialist supporting the proposal..
- Noise: In addition to the short-term construction noise, the operational phase of the development will increase the
  percentage of land users in the area that will be exposed to noise levels exceeding the recommended levels for
  urban areas. Regardless, the specialist supports the proposal, with the implementation of a combination of
  possible mitigation measures.
- **Visual and Social**: The respective specialists found that the proposal presents unacceptably high impacts on the affected communities, and hence, they do not support the proposed development.
- **Heritage**: Given that the Heritage Impact Assessment is focussed on the visual and social assessment, the Heritage Practitioner is also not supportive of the development as proposed.
- **Socio-economic**: The study recognises the negative impacts, however, it is concluded that the positive impacts will outweigh the negative and as such, the specialist supports the proposal.
- Traffic: The traffic study highlights several key impacts, including the replacement of a slip lane with a dedicated left-turn lane at the Ottery Road/South Road/Rosmead Avenue/Prince George Drive intersection, the closure of the Pluto Road southern leg, and the introduction of new left-in, left-out accesses. Traffic previously using Pluto Road will be redistributed to these new access points. Future (2040) projections show varying levels of service across key intersections, with some operating efficiently (LOS A–D), while others, like the Ottery Road/South Road intersection, may face higher congestion (LOS E in AM peak). Additional formal parking is planned as part of Work Package W8, along with continuous Class 2 cycle lanes, amended sidewalks, and pedestrian crossings. Queue lengths between closely spaced intersections are expected to remain within acceptable limits, and dedicated bus lanes will operate at a reasonable level of service. Overall, the proposed changes aim to improve traffic flow, accommodate future growth, and enhance non-motorized transport infrastructure.

For the No-Go Alternative, the status quo would largely remain resulting in no impact. Under this scenario, the positive impacts listed above would be foregone.

It is not the intention of the Applicant to decommission the proposed development as it would provide permanent connectivity within the greater IRT system.

The impacts are summarised in the tables below, which are duplications of the impact summary tables included in the Basic Assessment Report.

## **MITIGATION AND RESPONSE**

The proposed development and its associated activities have been investigated and assessed in relation to with the sensitivities identified in the baseline environment. Subsequently, the alignment of current and future development and management plans for the area (e.g., the existing road infrastructure) were considered. The assessment also considers the direct, indirect and cumulative impact on local communities as well as the greater Metropolitan area.

Mitigation measures have been proposed to minimize any adverse impacts, while measures to enhance the potential positive effects of the development have also been identified. Ultimately, the proposed development is driven by the pressing social need for improved connectivity and accessibility, ensuring greater inclusivity and integration within the community. Furthermore, the report informs authorities of uncertainties and assumptions to ensure that a cautious approach is adopted in decision-making.

# **Aquatic Biodiversity**

No specific mitigation measures have been proposed for managing the loss of aquatic biodiversity; however, general impact management actions have been outlined. During the construction phase, invasive alien plants must be removed and controlled in disturbed or spoil areas. Effective stormwater management should be implemented by installing appropriate infrastructure to dissipate flow and prevent erosion, while also ensuring that drip trays and impervious surfaces prevent contamination from chemicals and waste. Spill control measures include the use of containment systems, spill kits, and proper remediation of any fuel, oil, or chemical spills, with all incidents reported and waste disposed of at licensed facilities. Additionally, waste management protocols prohibit the disposal of rubble, spoil, litter, or waste into stormwater drains, and all waste must be appropriately removed offsite. Chemical ablutions should be serviced regularly, with a maintenance register kept on-site. During the operational phase, stormwater management remains a priority, requiring ongoing removal of invasive alien plants and routine inspections of the stormwater system, particularly after the rainy season, to assess

maintenance and repair needs. Regular maintenance of stormwater infrastructure should be conducted as necessary to ensure long-term functionality and environmental sustainability. These measures collectively aim to mitigate indirect impacts on aquatic biodiversity and maintain ecological integrity.

# **Terrestrial Biodiversity**

No specific mitigation measures have been proposed for managing terrestrial biodiversity species loss; however, general impact management actions have been identified. The site must be kept free of invasive alien plant species listed under the National Environmental Management: Biodiversity Act (Act 10 of 2004) and its associated Alien and Invasive Species Regulations (2014). Additionally, standard SHERQ (Safety, Health, Environment, Risk, and Quality) housekeeping practices must be maintained, including prohibiting the disposal of waste runoff into gutters, ensuring that all litter is removed from the site, and regularly servicing chemical ablutions with a disposal and maintenance register kept on-site. Furthermore, chemical toilets should be properly secured to the ground to prevent displacement. These measures aim to minimize environmental impacts and support biodiversity conservation within the project area.

### **Archaeology**

From an archaeological perspective, no significant concerns have been identified based on current knowledge. However, certain precautionary recommendations should be incorporated into the project approval. Project staff must be made aware of the potential for uncovering buried archaeological material. In the event that any archaeological material or human burials are discovered during development, all work in the immediate area must cease immediately. The find must be reported to the relevant heritage authorities, and an inspection by a qualified archaeologist may be required. As heritage resources are considered the property of the state, any significant discoveries may necessitate excavation and curation at an approved institution. These measures ensure compliance with heritage regulations and the preservation of any significant archaeological findings.

# **Heritage Resources**

The Heritage Impact Assessment has identified several heritage design indicators to guide the development of the project in a manner that enhances the townscape, protects heritage resources, and promotes urban connectivity. The design should contribute positively to the character of the area by enhancing the experience of the route for users, prioritizing pedestrian-friendly streetscapes, and minimizing road widths where possible. It is recommended that the demolition of culturally significant buildings be kept to a minimum, and pedestrian connectivity across the route should be improved through crossings, spatial connections at intersections, and traffic calming measures. The route's infrastructure should incorporate landscaping, non-motorized transport (NMT) accommodations, and urban furniture to create a distinct sense of place while maintaining access to local businesses and civic institutions. Historic elements such as existing granite and sandstone kerbs should be retained or repurposed.

The road infrastructure should be designed to cater to all users, not just vehicles and buses. Key considerations include accessibility, effective separation between pedestrians and vehicles, safety features such as crosswalks and parking spaces with visible signage, and provisions for pedestrian-friendly spaces with seating and greenery. Landscaping should integrate trees, low-scale plants, and aesthetic elements to preserve and enhance the area's visual appeal. Additionally, culturally significant buildings and structures should be carefully considered to ensure their character and streetscape context benefit from the project. Landmarks, mature trees, and local nodes should be preserved, and historic kerbs must be protected during construction.

Non-motorized transport (NMT) should be accommodated through dedicated routes for pedestrians and cyclists, ensuring clear differentiation from vehicular lanes using varied surface materials or levels. Wider NMT routes should be considered near retail areas, social amenities, and intersections, with urban furniture, cycle parking, and landscaping enhancing pedestrian comfort. Where wide NMT routes are not feasible along the entire stretch, strategically placed rest areas with seating, waste bins, and greenery should be introduced. Bus stops must be universally accessible, incorporating landscaping, sufficient sidewalk space, and urban amenities such as lighting, benches, and shading structures.

Undeveloped land along the route should be rezoned and developed where necessary, while vegetation preservation is crucial, with an emphasis on retaining mature trees and planting additional greenery in available spaces. Partnerships between local authorities and civic groups should be encouraged to maintain tree planting initiatives. Social indicators emphasize the importance of retaining the local social fabric, minimizing negative impacts on property values and aesthetics, and ensuring fair compensation for any involuntary relocations. The project should also present opportunities for community upgrades, such as installing recreational equipment.

A dedicated cycle lane should be integrated along the southern side of the street, creating a dual pedestrian and cyclist path while preserving sufficient sidewalk space on the northern side. Regular pedestrian crossings should align with the street grid and key destinations to promote spatial integration and mitigate the barrier effect of the new IRT route. Special landscape treatments should be incorporated at these crossings to reinforce their role in connecting different parts of the urban fabric.

The HIA recommends that the proposed road infrastructure and demolitions be revised and resubmitted to Heritage Western Cape (HWC) for approval, incorporating cultural and environmental considerations such as public art and heritage signage.

Several mitigation measures identified by the specialist will not be implemented, as detailed within the Basic Assessment Report (BAR). The reasons for this exclusion are comprehensively outlined and justified in the BAR, providing a thorough explanation for why these particular measures are deemed either infeasible or not applicable within the specific context of the project.

# **Social Aspects**

The CCT should follow the required legal processes for evicting tenants from properties they own, while ensuring that affected households are provided with a reasonable timeframe to move into alternative accommodation. The land acquisition

process should be transparent, with full and fair compensation for affected property owners based on market-related prices. This process should include the option of an independent valuation at no cost to the property owners and aim to help them secure a suitable replacement property within the same or similar residential area. Compensation should also account for potential lost rental income, legal costs, and removal costs.

To foster local economic growth, the CCT should engage with local community leaders and organizations, informing them of job opportunities for local builders and contractors. A database of local construction companies, particularly those owned by historically disadvantaged individuals (HDIs), should be created before the tender process begins. These companies should be notified about the project and invited to bid. The CCT should also ensure that a percentage of the construction workforce is sourced from the local community, in consultation with contractors.

Additionally, the CCT should establish a Monitoring Committee (MC) to oversee the construction phase, including representatives from the CCT, contractors, the local councillor, and community members. A Grievance Mechanism (GM) should also be put in place to allow the community to report concerns and ensure confidentiality for complainants. Both the MC and GM should be operational before construction begins.

The CCT should prioritize appointing local contractors, implement an HIV/AIDS awareness program for construction workers, and carefully manage the movement of construction workers on and off-site. Construction activities should comply with building regulations, and work hours should be restricted to weekdays (07:00–18:00) and Saturdays (08:00–13:00), with any after-hours work requiring discussion with the MC. A Communication Plan (CP) should be prepared to inform the public about construction timelines, road closures, and delays, utilizing social media platforms to keep local residents, schools, and businesses updated. Measures should be taken to minimize disruptions during peak traffic hours, ensuring that access to schools is not impacted during morning peak times. Abnormal loads should also be scheduled to avoid peak traffic. Lastly, the CCT should ensure that MyCiTi operations meet the stated objectives of providing safe, affordable, accessible, and efficient public transport.

Several mitigation measures identified by the specialist will not be implemented, as detailed within the Basic Assessment Report (BAR). The reasons for this exclusion are comprehensively outlined and justified in the BAR, providing a thorough explanation for why these particular measures are deemed either infeasible or not applicable within the specific context of the project.

### **Visual Aspects**

The design should prioritize the retention of mature existing trees while adding new street tree planting to support urban street tree succession. Sufficient urban precinct lighting and street furniture should be provided, but care should be taken to minimize light pollution, with lighting carefully controlled and well-integrated into the urban design, coordinated with signage. Shielded down-lights should be used for security purposes, especially in open areas. During the planning, design, and development phases, urban design and landscape proposals should focus on enhancing the streetscape areas, prioritizing local pedestrian movement.

In the construction phase, established tree clusters should be designated as 'no-go areas' for site camp establishment, material storage, stockpiling, and dumping to prevent damage. Construction activity should be limited to hoarded areas and disturbed spaces to minimize the impact on visual amenity resources. Post-construction, rehabilitation of disturbed areas is essential. The implementation of a Construction Environmental Management Plan (CEMP) will manage environmental issues, including noise, dust, and erosion control, helping mitigate construction-related visual impacts. For the operational phase, noise and air quality control measures, proper signage, and lighting to ensure safety and surveillance should be in place. The form, scale, massing, materials, and textures of the development should be suitable for the context, with landscape measures helping to integrate the project into the site. An Operational Environmental Management Plan (OEMP) should also be implemented, including detailed landscape plans by qualified landscape architects to minimize visual impacts and ensure compatibility with the surrounding environment.

A detailed landscape plan should be compiled, created by a registered Landscape Architect, to be submitted for approval by the City of Cape Town's Environmental Management Division. This plan should outline existing vegetation to be retained or removed, specify newly planted vegetation (including species and planting specifications), provide details on tree staking and tree sizes, and include the density of plant species and sizes. It should also show existing and finished ground levels at the base of trees, landscaping features such as fences, walls, paving, and street furniture.

Several mitigation measures identified by the specialist will not be implemented, as detailed within the Basic Assessment Report (BAR). The reasons for this exclusion are comprehensively outlined and justified in the BAR, providing a thorough explanation for why these particular measures are deemed either infeasible or not applicable within the specific context of the project.

# **Socio-Economic Aspects**

The pre-construction phase should focus on assisting affected households in finding suitable alternative housing options, preferably within the same neighbourhood or nearby, to minimize social disruption.

During the construction phase, project developers should prioritize using locally sourced materials, goods, and products, while also subcontracting local construction firms, particularly SMMEs and BBBEE-compliant enterprises, to maximize community benefits. Community Information Events should be held to inform local residents about upcoming projects and available employment opportunities. Efforts should be made to employ local workers, providing economic benefits to the community. Local suppliers should be engaged to provide services such as transport and catering for the construction crews. Additionally, prioritizing the hiring of local residents for construction jobs will increase household incomes. Alternative routes for commuters should be established to bypass construction areas, reducing congestion on affected roads. Traffic flow should be managed with temporary control measures, including signage and signals, to minimize delays, and construction activities should be scheduled during off-peak times to reduce traffic impact.

In the operational phase, the IRT network operator should be encouraged to source materials, goods, and services from local suppliers to support the local economy. Jobs should be created for local community members to enhance the economic well-being of the surrounding areas. Increased access to economic hubs such as Wynberg should be prioritized, especially for low-income individuals and families facing mobility barriers, with sufficient MyCiTi bus services along this route. The IRT network should operate efficiently and at an affordable cost, with regular monitoring of traffic patterns and congestion levels to address emerging issues. Additionally, pedestrian infrastructure in the Wynberg area should be improved by enhancing sidewalks, crosswalks, signals, and lighting, promoting safe walking and reducing reliance on cars.

#### **Noise Aspects**

The following noise management measures should be implemented across various phases of the project. During the preconstruction phase, the road envelope should be increased, and school-specific measures should be put in place, particularly for Wynberg Creche and Douglas Road Primary, to ensure indoor noise levels are kept below 40 dBA. Potential measures include perimeter barriers and building acoustic treatments.

In the construction phase, construction activities should be limited to daytime working hours (07:00 to 17:00). If deviation from these hours is necessary, affected receptors should be informed of the type of activity, expected noise levels, and duration. Construction should not take place over weekends, and local communities along the road section should be informed about the type and duration of activities. Service agreements should be established with contractors to minimize noise, and mobile diesel generators must be fitted with exhaust silencers and contained within suitable acoustic enclosures. Regular inspection and maintenance plans should be implemented to withdraw and fix noisy equipment. Acoustic measures such as mobile enclosure screens or acoustic sheds should be used when needed, for example, with jackhammers and compactors.

To reduce noise at the source, several general measures should be adopted, such as avoiding unnecessary engine revving, maintaining haul roads, using rubber linings in trucks, minimizing drop heights of materials, and starting up plant and vehicles sequentially. Audible reversing warning systems on vehicles should have a minimal noise impact, and speed limits should be enforced on temporary roads. Contractors and operatives should be trained to use appropriate techniques to minimize noise, with effective supervision to ensure best practices. A complaint register should be maintained, and complaints must be resolved promptly. Noise measurements should be conducted in response to complaints, with specific mitigation measures implemented as needed.

During the operational phase, collaboration between government, engineers, and the community is essential. Strategic landscaping should be considered to supplement noise mitigation efforts, and road surfaces should be maintained to reduce noise. Speed limits should be enforced, traffic signaling optimized, and heavy vehicles should be rerouted to minimize noise impact. Continuous community engagement is important to disclose impacts and ensure informed decision-making.

Several mitigation measures identified by the specialist will not be implemented, as detailed within the Basic Assessment Report (BAR). The reasons for this exclusion are comprehensively outlined and justified in the BAR, providing a thorough explanation for why these particular measures are deemed either infeasible or not applicable within the specific context of the project.

### Landscaping

The landscaping strategy is included as part of the proposed development in order to uplift the aesthetics of the area. The inclusion of indigenous, water-wise, low maintenance plants would provide for a more sustainable project. The EMPr includes the landscaping as part of the design considerations, and measures such as the waterwise and indigenous plants are included in the design specifications of the EMPr.

Implementable management measures for design, planning, construction, and operation phase of the proposed development have also been integrated into the specifications contained in the EMPr, which would also be conditions of Environmental Authorisation (if granted).

Several mitigation measures identified by the specialists will not be implemented, as detailed within the Basic Assessment Report (BAR). The reasons for this exclusion are comprehensively outlined and justified in the BAR, providing a thorough explanation for why these particular measures are deemed either infeasible or not applicable within the specific context of the project.

# **NEED AND DESIRABILITY**

The City of Cape Town's transport network is under increasing pressure, particularly in the Cape Flats area, where public transport efficiency is critical for economic participation, social mobility, and urban sustainability. The expansion of road infrastructure, the introduction of dedicated bus lanes, and the enhancement of non-motorised transport (NMT) facilities are urgent interventions required to improve connectivity, reduce congestion, and enhance commuter safety. The project is therefore critical at this point in time.

From a spatial perspective, the site is ideal for the proposed development, as it forms part of an existing transport corridor identified for public transport expansion in the City's Integrated Transport Plan (ITP), Spatial Development Framework (SDF), and Integrated Development Plan (IDP). Therefore, delaying the project could result in increased congestion, longer travel times, and hindered economic activity in key commercial and residential nodes. Furthermore, investment in public transport infrastructure now will ensure that future urban growth and densification in the area are supported by a well-integrated, accessible transport system.

The proposed route's location has been determined by the City of Cape Town's systems planning team. As outlined in the City's Transport Management Strategy and Development Framework (CTMSDF), this route will enhance accessibility for local communities and businesses, providing improved connections to other work centres and development nodes.

The widening of South Road, intersection upgrades, and the new railway bridge will provide immediate and long-term mobility benefits, facilitating more efficient public transport operations and improved traffic flow for private vehicles. The project also supports sustainability objectives by reducing vehicle emissions through improved traffic efficiency and prioritizing public and non-motorised transport users.

Several factors support the proposed project on this site, including the lack of biophysical sensitivities, the existing designation of most of the site for transport use, the alignment with municipal and regional planning frameworks, and the fact that it was determined as the most appropriate route for this critical link to those residing in the East to the opportunities in the West (economic, recreational and health).

# **Community Need**

The proposed project is a critical intervention for the community and the broader Cape Town metropolitan region, particularly the Cape Flats, Wynberg, and surrounding areas, where public transport dependency is high. Currently, commuters face significant challenges due to traffic congestion, unreliable public transport services, and safety concerns. The implementation of dedicated bus lanes, intersection upgrades, and improved non-motorised transport (NMT) infrastructure aims to enhance accessibility, efficiency, and commuter safety, thereby fostering a more reliable and inclusive public transport system.

From a transport and mobility perspective, the project directly contributes to the development of an integrated, high-capacity public transport network designed to reduce travel times, alleviate congestion, and promote equitable access to economic opportunities. The planned road infrastructure upgrades will improve bus operations along the Metropolitan South-East Corridor (MSEC), strengthening connectivity between residential areas and key commercial hubs. This is particularly significant for lower-income commuters, who rely on affordable, safe, and efficient transport options to access employment, education, healthcare, and essential services.

The project aligns with the City's Integrated Development Plan and Spatial Development Framework, both of which are strategic planning instruments grounded in community needs. By supporting sustainable urban development, the initiative contributes to long-term spatial and economic restructuring efforts.

Beyond transport-related benefits, the project carries broader socio-economic implications. Enhanced mobility and connectivity within the Wynberg-Plumstead area and the greater MSEC are expected to stimulate local economic activity, generate employment opportunities during construction and operation, and contribute to social upliftment in affected communities. Furthermore, the proposed road improvements, including the construction of a new bridge over the railway line, will help address historical spatial inequalities between the eastern and western areas by improving access to economic and social opportunities for residents and commuters in the region.

The proposed development also provides the City of Cape Town with an opportunity to re-structure and intensify the regional area and transport route, previously neglected and subject to apartheid era planning. These opportunities are as follows:

- Develop vibrant areas by removing barriers to access;
- Improve connectivity throughout the Metropolitan areas;
- Increase efficiency of people's movement and as an aid to the movement of commuters and development activities;
- Improve access and transportation routes to encourage future development and intensification of use;
- Decrease walking distances from residential and places of work to public transport facilities;
- Reinforce convergence on core routes and access points; and
- Reinforce the use of the existing rail stations.

### Impact on Sensitive Natural and Cultural Areas

Given that the proposed route is located within an urban setting, its impact on the natural environment will be negligible. A freshwater and botanical compliance assessment has confirmed that the route is ecologically transformed, with no areas of natural sensitivity requiring consideration.

The heritage, social and visual practitioners have reported that the road upgrades will have an impact on the socio-cultural environment for the surrounding communities. This is as a result of road closures and the magnitude of the infrastructure being introduced. This is detailed in full in the baseline and impact assessment sections of the BAR.

# Sustainability

Overall, all development must, in terms of Section 24 of the Constitution, be ecologically sustainable, and economic and social development must be justifiable.

The proposed development has applied sustainable development to the following factors:

- Disturbance of ecosystems and loss of biodiversity: The proposed development ensures that ecosystems are not
  disturbed, and biological diversity is not compromised. There are no sensitive areas along the route that will be
  encroached upon or significantly impacted.
- Pollution and environmental degradation: The development prioritizes the avoidance of pollution and environmental degradation. Where complete avoidance is not possible, pollution will be minimized and remedied through the reduction of private transport, thus decreasing emissions and traffic congestion.
- Waste management: Waste generation will be avoided wherever possible. In cases where waste is produced, it will be minimized, reused, or recycled. Construction phase waste will be managed according to the guidelines set out in the Environmental Management Programme, and the operational phase is not expected to generate significant waste.

- Non-renewable resource use: The development will promote responsible and equitable use of non-renewable resources by providing a sustainable public transport service to previously disadvantaged communities. Additionally, the proposal aims to reduce private vehicle use and decrease reliance on fossil fuels.
- Risk-averse approach: A cautious and risk-averse approach will be applied, considering the limits of current knowledge regarding potential consequences. The design of the development will account for climate change and future urban development in the area to ensure long-term sustainability.
- Minimizing negative impacts: Anticipating and preventing negative impacts on both the environment and people's
  environmental rights is a priority. Where impacts cannot be avoided, efforts will be made to minimize and remedy
  effects

# **Cumulative Impacts**

The cumulative impact of the implementation of this project will have a significant positive outcome for the citizens of the greater Metropolitan area. This particular work package will have cumulative negative consequences on certain businesses and residences. This is detailed in the impact assessment.

The proposed development and its associated activities have been investigated and assessed in relation to with the sensitivities identified in the baseline environment. Subsequently, the alignment of current and future development and management plans for the area (e.g., the existing road infrastructure) were considered. The assessment also considers the direct, indirect and cumulative impact on local communities as well as the greater Metropolitan area.

Mitigation measures have been proposed to minimize any adverse impacts, while measures to enhance the potential positive effects of the development have also been identified. Ultimately, the proposed development is driven by the pressing social need for improved connectivity and accessibility, ensuring greater inclusivity and integration within the community.

### **PUBLIC PARTICIPATION**

The public participation process (PPP) proposed and currently underway align with the minimum legislative requirements prescribed in regulation 41 of the EIA Regulations, 2014 (as amended).

The pre-application Public Participation Process (PPP) activities include the following (noting that no alternative sites have been considered in the impact assessment process, as the relevant section of road is a major route linking key neighbourhoods and is deemed appropriate for the proposed development):

- An extensive public participation process was held in 2015 for the Conceptual Design of the I RT Phase 2A, then referred to as the Lansdowne Wetton Corridor (LWC) along trunk routes T11 and T12, with the exclusion of the Wynberg end, which was at the time the subject matter of a High Court application. The PPP held in 2015 initially engaged with Sub-councils, Ward Committees, Ward Councillors, Ward Development Forums, potentially affected Taxi Leadership and Civic based organisations, whereby members were briefed with respect to the scope of the project and advised of forthcoming open days. Following this, 33 open days were held during May/June/July 2015 in compliance with Section 17 of the Local Government: Municipal Systems Act No. 32 of 2000. This PPP allowed the public, other spheres of government, organized service providers and other interested parties the opportunity to submit comments, recommendations and inputs to the City for consideration. Notices were placed in local newspapers advising the public of open days where the draft Conceptual Design was made available. Official were in attendance to elaborate on the project, provide points of clarity on the Conceptual Design and answer questions. Please refer to Appendix P of the Basic Assessment Report.
- Compilation of a preliminary Interested and Affected Party (I&AP) database, informed by research on relevant officials and stakeholder groups who may have an interest in the area or the project.

The post-application Public Participation Process (PPP) undertaken for the current public review period of this post-application Draft BAR includes the following activities:

- A 30-day public comment period for the Draft BAR.
- Notification of the availability of the Draft BAR was emailed to the preliminary Interested and Affected Party (I&AP)
  database.
- A knock-and-drop exercise, along with the notification letter, was conducted for residences and formal institutions adjacent to the proposed development.
- The Draft BAR has been made available for download on Chand's website throughout the comment period.
- An executive summary for separate download (for I&APs with limited access to data) is also available on Chand's
  website during the comment period.
- Site notices have been placed at the start, middle, and end of the route on South Road and Waterbury Road. These notices, in English, contain the information prescribed by the EIA Regulations, 2014, as amended, and PPP guidelines.
- Advertisements have been placed in two local newspapers distributed to all affected areas along the route containing the information as prescribed by the EIA Regulations, 2014, as amended, and PPP guidelines.
- A hardcopy of the Executive Summary has been made available at the Wynberg Library and the local Subcouncil
  offices, along with a comment box and comment forms, for the duration of the public commenting period.
- A hardcopy of the Executive Summary has been made available at the Wynberg Library and Subcouncil offices, along with a comment box and comment forms, for the duration of the public commenting period.
- Hard copies of the BAR will be made available to I&APs or commenting parties, upon reasonable request.

To provide access to commenting for individuals without access to data, email, or fax, Chand has encouraged I&APs to make telephonic contact and submit their comments, which will be recorded (in writing) as part of the Basic Assessment process.

All registrations and comments received during the 30-day public comment period will be added to the I&AP database and included in the final BAR for submission to the DEA&DP.

Evidence for the activities listed above will be included in the Comments & Responses Report of the Final BAR, which will be submitted to the DEA&DP for decision-making.

Once the DEA&DP has reviewed the final BAR and issued its decision, the decision, along with the date, reasons for decision, means of accessing the decision, an explanation of the appeals process, and any further requirements, will be distributed to the registered I&APs via email for those with email addresses and by post for those without. The decision will also be uploaded to Chand's website for download. The applicable appeal period will be explained in accordance with the decision.

### CONCLUSION

Through Chand's investigation, which has entailed inputs from the design team and the specialists - noting that engagement with I&APs is still underway – several impacts have so far been identified and considered.

The preferred alternative proposes transport infrastructure to connect Wynberg Main Road in the west to Ottery Road in the east via South Road. It will include several road and intersection upgrades as well as a new bridge over the railway line to accommodate vehicular, IRT and NMT traffic. This will necessitate acquisition of some private properties, demolition of several structures as well as the moving, upgrading or protecting of service infrastructure.

Route alternatives were thoroughly considered in a preceding route analysis process. Therefore, no alternative route alignments were considered in this Basic Assessment process. The nature of the project precludes consideration of meaningful technology and operational alternatives. As such, this was not explored.

This Basic Assessment was based on two design alternatives for the route at the existing railway line. The preferred option (Alternative 1) proposes an overpass (bridge) while Alternative 2 considered an underpass. For technical reasons, that has serious maintenance and financial implications, as detailed above.

The Applicant is mandated to provide transport networks for the City of Cape Town and would not propose developments beyond this scope. The Applicant wishes to develop to IRT networks throughout the City of Cape Town and, therefore, no activity alternatives were (or could have been) considered.

The preferred alternative maximises on design potential. Provision of the largest cross-section possible enables the delivery of the best possible product and service to the community in the form of a useful and valuable network for public transport. The road needs to accommodate normal vehicular traffic as well as the IRT buses such that traffic flow remains smooth and that those buses, ideally, have their own lanes. This can be achieved with Alternative 1. From a biophysical perspective, there are no sensitive areas along the surface of the route which would have to be avoided which further supports the preferred layout alternative.

It is acknowledged that, for those in the vicinity of the railway crossing, Alternative 2 (underpass) may be more visually acceptable if compared to the preferred Alternative 1. However, the overpass structure offers substantial benefits in terms of minimizing continual groundwater and soil disruption. During geotechnical investigations, it was determined that the location has a relatively shallow water table, which would require a robust and costly subsoil system for managing groundwater if an underpass were to be considered. Continuous groundwater pumping would be required to keep the underpass dry, which would be both operationally demanding and expensive to maintain over time. In contrast, the overpass avoids this groundwater management issues, offering a more sustainable, cost-effective and viable solution in the long term.

Furthermore, the continuous operation of a pump generator to manage groundwater presents significant environmental and security challenges. Continuous operation of a pump generator would lead to ongoing emissions, primarily carbon dioxide (CO2), if powered by fossil fuels. This contributes to climate change by increasing the carbon footprint of the project. The constant running of generators also places a strain on energy resources. As efforts are being made worldwide to reduce emissions and shift towards more sustainable practices, the reliance on such energy-intensive methods becomes increasingly counterproductive in terms of environmental goals. Homeless individuals may seek shelter in an underpass, particularly in areas where the environment is more sheltered and protected from the elements. While this may offer temporary relief to the individuals, it creates security concerns for the surrounding community. The presence of vagrants in the area could lead to risks such as theft, vandalism, or even accidents, especially if the underpass is not properly monitored.

The EAP acknowledges that the visual and social specialist believes that an alternative route should have been considered as part of this Basic Assessment. Additionally, this recommendation/opinion is acknowledged as part of the Heritage Practitioners report. Seeing that the heritage study was focussed on visual and social matters, the heritage specialist supports the conclusions of these specialists and recommended to HWC that a negative comment be given to the DEA&DP. HWC's comment will be included in the Final BAR.

However, as previously mentioned, a thorough route analysis which considered multiple factors, including technical/engineering aspects and property acquisition requirements, informed the most reasonable and feasible route, which was then taken into the environmental investigations.

Addressing these challenges requires a balance between social and environmental responsibility, energy efficiency, and ensuring the security of infrastructure in a way that is both sustainable and safe for all parties involved.

Whilst acknowledging the noise, social, visual and heritage impacts on the community in the immediate vicinity of the project, the proposal is in the interest of the greater good of a much larger community.

Overall, the overpass option provides a more practical, cost-effective, environmentally friendly and safer solution, aligning with sustainable development principles and minimizing the need for extensive maintenance and management measures.

The proposed development meets the need and desirability criteria by addressing critical infrastructure gaps in the City of Cape Town's public transport network, improving accessibility, mobility, and sustainability. The project is aligned with both the City's spatial, development and transport planning frameworks and municipal goals, contributing to economic development, social equity, and environmental sustainability. The development is designed to meet current and future needs, with clear benefits to the broader communities, including improved access to essential services and better transportation options, ensuring that it is both desirable and necessary for the long-term growth and well-being of the area.

On balance and taking into account the positive impact on the greater Cape Town area, especially numerous previously disadvantaged communities, it is the recommendation of the EAP that the Preferred Alternative 1 be authorised.

As mentioned above, and repeated here, the alternatives analysis explored multiple route options and the preferred route was deemed to be the most reasonable and feasible option that the City could consider for implementation. This decision was based on technical, social and financial factors that were considered in a peer-revied, in-depth investigation (see 'note on alternative routes' as included in Section H(1.1) of this report). Given the importance of this link (as exemplified in the Urban-Econ socio-economic report), and the alignment of this project with national, provincial and local policies, it is critical to view this project with a wider lens. The development presents the opportunity for historical redress through improved connectivity and access provided by the proposed road widening for generations to come.

Table A. Summary of impacts for Planning, Design and Development Phase

	lwanak	Preferred Alternative (Overpass)		Design Alternative (Underpass)		No-Go Alternative	
	Impact	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation
	<b>General:</b> Resource Use - Depletion of natural Resources	Medium (-)	Low (-)	Medium (-)	Low (-)	Zero	Not Applicable
Phase: Planning, Design and Development	General: Subsidence	Not applicable as impact was only identified for the design alternative (underpass)  High (-)  Medium/High (-)		Not a	Not applicable		
	General: Traffic Impacts	Medium (-)	Low (-) to Medium (-)	Medium (-)	Low (-) to Medium (-)	Not applicable	
	<b>Social:</b> Creation of employment and business opportunities during the construction phase	Medium (40)	Medium (55)	Not as	ssessed	No impact as it maintains the current status quo.	
	<b>Social:</b> Potential impacts on family structures and social networks associated with the presence of construction workers.	Low (18)	Low (15)	Not as	ssessed	No impact as it maintains the current status quo.	
	<b>Social:</b> Potential safety and security risk posed by presence of construction workers on a site.	Medium (40)	Low (24)	Not assessed		No impact as it maintains the current status quo.	
	<b>Social:</b> Potential noise dust and safety impacts associated with movement of construction related traffic to and from the site.	Medium (33)	Low (24)	Not assessed  No impact as it mo			
	<b>Socio-Economic:</b> Legal eviction of affected households	Medium (-)	Low (-)	Medium (-) Low(-)		None	

Socio-Economic: Temporary impact on local economy (GDP)	Medium/High (+)	High (+)	Medium/High (+)	High (+)	None
Socio-Economic: Temporary impact on employment	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	None
<b>Socio-Economic:</b> Temporary impact on household income	Medium/High (+)	High (+)	Medium/High (+)	High (+)	None
<b>Socio-Economic:</b> Temporary impact on sense of place	Medium (-)	Medium (-)	Medium (-)	Medium (-)	None
<b>Socio-Economic:</b> Temporary impact on traffic congestion	Medium/High (-)	Low(-)	Medium/High (-)	Low(-)	None
Visual: Visual Impacts	High (-)	Moderate (-)	Moderate (-)	Moderate (-)	Neutral
Heritage: Townscape, road closures, built environment, natural environment, public realm including streetscape and NMT, left over land, rail crossing.	High Negative (80)	High Positive (70)	Not as	ot assessed Not Applicable	
Noise: Noise Impacts	Medium/High	Medium (-)	Medium/High	Medium (-)	No construction therefore no noise impact

Table B. Summary of impacts for Operational Phase

		Preferred Alternative (Overpass)		Design Alternative (Underpass)		No-Go ALTERNATIVE	
	Impact	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation
	General: Traffic impacts	Very High (+)	High (+)	Very High (+)	High (+)	Not Ap	plicable
	General: Climate change impacts – reduction in Greenhouse Gas emissions	High (+)	High (+)	High (+)	High (+)		impacts would be gone
	<b>Social:</b> Provision of safe, affordable, accessible and efficient public transport	Medium (56)	High (75)	Not as	ssessed		it maintains the tatus quo.
Phase: Operational	Impact on the social fabric of the area, specifically the areas located along South Road.     Environmental justice issues.     Impacts associated with involuntary resettlement.     Impacts associated with the proposed bridge over the railway line.     Impacts associated with proposed road closures along South Road.	High (80)	Medium (44)	Not as	ssessed		it maintains the tatus quo.
	<b>Social:</b> The no-development option (nogo alternative) would represent a lost opportunity to implement the CCTs Transit-Oriented Development (TOD) approach to spatial planning and would be contrary to the stated objectives and principles contained in the CCT SDF and IDP.	Not Applicable			High (80)	High (70)	
	Socio-Economic: Impact on production and GDP during operational phase	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	No	one

<b>Socio-Economic:</b> Sustainable impact on employment	Low(+)	Low(+)	Low(+)	Low(+)	None
<b>Socio-Economic:</b> Sustainable impact of transport affordability on household income	Medium (+)	Medium (+)	Medium (+)	Medium (+)	None
<b>Socio-Economic:</b> Sustainable impact on increased mobility and access to public transport	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	None
<b>Socio-Economic:</b> Sustainable impact on travel time	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	None
<b>Socio-Economic:</b> Impact on access to work opportunities	Medium/High (+)	Medium/High (+)	Medium/High (+)	Medium/High (+)	None
<b>Socio-Economic</b> Sustainable impact on traffic congestion	Medium (+)	Medium (+)	Medium (+)	Medium (+)	None
<b>Socio-Economic:</b> Sustainable impact on access to education, recreational and health facilities	Medium/High (+)	High (+)	Medium/High (+)	High (+)	None
<b>Socio-Economic:</b> Impact on enhancement of Wynberg as a commercial node	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	None
Visual: Visual impacts	Very High (-)	High (-)	High (-)	Moderate (-)	Neutral (0)
Noise: Noise impacts	Medium/High	Medium/High (- )	Medium/High	Medium/High (- )	Residents along sections of current South Road alignment are already exposed to noise levels above the CCT determined rating level for such districts.  The noise impact will remain unchanged.

# IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

- 1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.
- 2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 19998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".
- 3. Submission of documentation, reports and other correspondence:

The Department has adopted a digital format for corresponding with proponents/applicants or the general public. If there is a conflict between this approach and any provision in the legislation, then the provisions in the legislation prevail. If there is any uncertainty about the requirements or arrangements, the relevant Competent Authority must be consulted.

The Directorate: Development Management has created generic e-mail addresses for the respective Regions, to centralise their administration. Please make use of the relevant general administration e-mail address below when submitting documents:

# DEADPEIAAdmin@westerncape.gov.za

Directorate: Development Management (Region 1):
City of Cape Town; West Coast District Municipal area;
Cape Winelands District Municipal area and Overberg District Municipal area.

# DEADPEIAAdmin.George@westerncape.gov.za

Directorate: Development Management (Region 3):
Garden Route District Municipal area and Central Karoo District Municipal area

General queries must be submitted via the general administration e-mail for EIA related queries. Where a case-officer of DEA&DP has been assigned, correspondence may be directed to such official and copied to the relevant general administration e-mail for record purposes.

All correspondence, comments, requests and decisions in terms of applications, will be issued to either the applicant/requester in a digital format via email, with digital signatures, and copied to the Environmental Assessment Practitioner ("EAP") (where applicable).

- 4. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.
- 5. All applicable sections of this BAR must be completed.
- 6. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.
- 7. This BAR is current as of **April 2024**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at <a href="http://www.westerncape.gov.za">http://www.westerncape.gov.za</a> to check for the latest version of this BAR.

- 8. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.
- 9. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
- 10. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.
- 11. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.
- 12. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.
- 13. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.
- 14. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link <a href="https://screening.environment.gov.za/screeningtool">https://screening.environment.gov.za/screeningtool</a> to generate the Screening Tool Report. The screening tool report must be attached to this BAR.
- 15. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for-Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

#### **DEPARTMENTAL DETAILS CAPE TOWN OFFICE:** DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 1) (City of Cape Town, West Coast District, Cape Winelands District & Overberg District) The completed Form must be sent via electronic mail to: The completed Form must be sent via electronic mail to: DEADPEIAAdmin@westerncape.gov.za DEADPEIAAdmin.George@westerncape.gov.za Queries should be directed to the Directorate: Queries should be directed to the Directorate: Development Development Management (Region 1) at: Management (Region 3) at: E-mail: DEADPEIAAdmin@westerncape.gov.za E-mail: DEADPEIAAdmin.George@westerncape.gov.za Tel: (044) 814-2006 Tel: (021) 483-5829 Western Cape Government Western Cape Government Department of Environmental Affairs and Development Department of Environmental Affairs and Development Attention: Directorate: Development Management (Region Attention: Directorate: Development Management (Region

# **MAPS**

Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.

# Locality Map: Please refer Appendix A1

The scale of the locality map must be at least 1:50 000.

For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map.

The map must indicate the followina:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- road names or numbers of all the major roads as well as the roads that provide access to the site(s)
- a north arrow;
- a legend; and
- a linear scale.

For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.

Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.

Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.

# Site Plan: Please refer t Appendix B1

Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following:

- The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale.
- The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan.
- On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided.
- The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan.
- The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan.
- Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development <u>must</u> be clearly indicated on the site plan.
- Servitudes and an indication of the purpose of each servitude must be indicated on the site plan.
- Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to):
  - o Watercourses / Rivers / Wetlands
  - o Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable);
  - Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"):
  - Ridges
  - Cultural and historical features/landscapes;
  - o Areas with indigenous vegetation (even if degraded or infested with alien species).
- Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted.
- North arrow

A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.

# Site photographs Please refer to Appendix C

Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as **Appendix C**. The aerial photograph(s) should be

	supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity	A map of the relevant biodiversity information and conditions must be provided as an overlay
Overlay Map:	map on the property/site plan. The Map must be attached to this BAR as <b>Appendix D</b> .
Please refer to	
Appendix D	
Linear activities	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek
or development	94 WGS84 co-ordinate system.
and multiple	Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm
properties	Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix.
Please refer to	For linear activities that are longer than 500m, please provide a map with the co-ordinates taken
Appendix A3	every 100m along the route to this BAR as <b>Appendix A3</b> .

# **ACRONYMS**

BAR:	Basic Assessment Report
CBA:	Critical Biodiversity Area
CCT:	City of Cape Town
CIDs:	City Improvement Districts
CP:	Communication Plan
CPGs:	Contract Participation Goals
CTMSDF:	City's Transport Management Strategy and Development Framework
DAFF:	Department of Forestry and Fisheries
DEA& DP:	Department of Environmental Affairs and Development Planning
DEA:	Department of Environmental Affairs
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EAP:	Environmental Assessment Practitioner
EIA:	Environmental Impact Assessment
EMPr:	Environmental Management Programme
ESA:	Ecological Support Area
GM:	Grievance Mechanism
HD:	Historically Disadvantaged
HWC:	Heritage Western Cape
IDP:	Integrated Development Plan
IPTN:	integrated public transport networks IPTN
IRPTN:	Integrated Rapid Public Transport Networks
IRT:	Integrated Rapid Transit
LIA:	Landscape Irrigation Association
LiDAR:	Light Detection and Ranging
LWC:	Lansdowne-Wetton Corridor
MC:	Monitoring Committee
MSDF:	Municipal Spatial Development Framework
MSE:	Metro South East Corridor
NDP:	National Development Plan
NEMA:	National Environmental Management Act
NFEPA:	National Freshwater Ecosystem Protection Assessment
NHRA:	National Heritage Resources Act

NID:	Notification for Intent to Develop
NMT:	Non-motorised Transport
NSBA:	National Spatial Biodiversity Assessment
PLTF	Provincial Land Transport Framework
PPP:	Public Participation Process
PSDF:	Provincial Spatial Development Framework
ROD:	Record of Decision
SALI:	South African Landscapers Institute
SANA:	South African Nurseryman Association
SANBI:	South African National Biodiversity Institute
SANS:	South African National Standards
SUDS:	Sustainable Urban Drainage Systems
SWSA:	Strategic Water Source Area
TOR:	Terms of Reference
VAC:	Visual Absorption Capacity
WCBSP:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government
WMA:	Water Management Area

# **LIST OF FIGURES**

Figure 1: Locality Map for the proposed IRT W8 route (Created using Google Earth Pro, 2025)	33
Figure 2: Existing buildings within the road envelope to be demolished - western portion (source: HHO Conceptual	Design
Review Report, August 2023)	
Figure 3: Existing buildings within the road envelope to be demolished – eastern portion (source : HHO Conceptual	
Review Report, August 2023)	
Figure 4: Typical cross section for bridge structure (rail overpass) (source: HHO, 2025)	35
Figure 5: Conceptual view of three-span bridge (road-over-rail) (source: HHO Conceptual Design Review Report, Augus	
Figure 6: Integrated public transport network. Site Location within the MSDF – circled in black (extracted from City of Cap	ne Towr
MSDF, 2023)	
Figure 7: Future Bus Rapid Transport Trunk Routes – MSE Corridor within the MSDF demarcated in red (extracted from	City o
Cape Town MSDF, 2023).	
Figure 8: Conceptual development corridors and urban nodes. Site Location within the MSDF is circled in black (extracte	ed from
City of Cape Town MSDF, 2023).	
Figure 9: MSDF Biodiversity Network (extracted from City of Cape Town MSDF, 2018)	
Figure 10: Biodiversity conservation map indication no sensitivities located within the proposed development footpri	
surrounds (Created using CapeFarmMapper, July 2024)	51
Figure 11. Map showing the ecological threat status of the proposed development site (Created using CapeFarmMapp	er, July
2024)	
Figure 12: Site Location within the MSDF - circled in black (extracted from City of Cape Town MSDF, 2023)	
Figure 13. Aquifer Type and Yield (Cape Farm Mapper, July 2024)	61
Figure 14: Extract of the Aquatic Biodiversity Theme from the Screen Tool Report (July 2024)	62
Figure 15. Map showing no watercourses, NFEPA or NWM5 wetlands are situated within or traverse the site footprint (NCC,	
Figure 16: Extract of the Terrestrial Biodiversity Theme from the Screening Tool Report (July 2024)	
Figure 17. Conservation Map (Cape Farm Mapper, July 2024)	
Figure 18. Vegetation Map (Cape Farm Mapper, July 2024)	
Figure 19. Aerial view of Waterbury Road in 1945 showing erven 70084 and 70085 (red boxes) (source: O'Donogue, 2024	
Figure 20. Overview of W8 route-adjacent erven (yellow outlines) and W8 route (red) in relation to graded heritage reso	
viz. Grade 3B (dark orange), 3C (light orange), some significance evident (light green), and not conservation worthy	
(Source: O'Donoghue, 2024)	
viz. Grade 3B (dark orange), 3C (light orange), some significance evident (light green), and not conservation worthy	
(Source: O'Donoghue, 2024).	
Figure 22. Overview of W8 route-adjacent erven (yellow outlines) and W8 route (red) in relation to graded heritage reso	
viz. Grade 3B (dark orange), 3C (light orange), some significance evident (light green), and not conservation worthy	
(Source: O'Donoghue, 2024).	
Figure 23. Overview of W8 route-adjacent erven (yellow outlines) and W8 route (red) in relation to graded heritage reso	
viz. Grade 3B (dark orange), 3C (light orange), some significance evident (light green), and not conservation worthy	
(Source: O'Donoghue, 2024).	
Figure 24. Residential Areas (Source, Urban-Econ, 2024)	
Figure 25. Employment (2023) (source: Urban-Econ, 2024)	
Figure 26. Household income (2023) (Source: Urban-Econ, 2024)	
Figure 27. Educational Attainment (2023) (Source: Urban-Econ, 2024)	
Figure 28. Household Expenditure (2023) (source: Urban-Econ, 2024)	
Figure 29. Services Breakdown (2023) (source: Urban-Econ, 2024)	

Figure 30. Map of land use in and around primary focus area (Source: Urban-Econ, 2024)	78
Figure 31. Site Context (Gibbs, 2024)	
Figure 32. Visual resources Western Portion of site (source: Gibbs, 2024)	
Figure 33. Visual Resources - Middle portion (A) (source: Gibbs, 2024)	
Figure 34. Visual Resources - Middle portion continued (B) (source: Gibbs, 2024)	
Figure 35. Visual Resources - Eastern Portion (source: Gibbs, 2024)	
Figure 36. Digital view catchment area (10km radius) of the site (source: Gibbs, 2024)	87
Figure 37. Zones of visual influence (4km radius) of the site (Source: Gibbs, 2024)	
Figure 38. Affected areas within 500m of the highest point of the rail-overpass (Source: Gibbs, 2024)	88
Figure 39. Viewshed areas with 250m of the site shown in perspective (Source: Gibbs, 2024)	89
Figure 40. Baseline noise survey, measurement locations	
Figure 41. Proposed Intersections (source: HHO, 2025)	
Figure 42. Future Access Opportunities (source: HHO, 2025)	98
Figure 43. Total Future Traffic Flows (Source: HHO, 2025)	
LIST OF TABLES	
Table 1: Proposed permanent or full road closures along the IRT W8 route.	32
Table 2: Geometric Engineering Design Considerations & Traffic and Bus Operations Specifications (source: H-	10 Conceptual
Design Review Report, August 2023)	36
Table 3: Extent of Proposed Widening into Public Open Space Zoned Properties	37
Table 4. Demolition of existing infrastructure on privately owned properties (source: Barbour, 2024)	71
Table 5. Demolition of existing infrastructure on state owned properties (source: Barbour, 2024)	71
Table 6. Plumstead Population Indices (source: Barbour, 2024)	
Table 7. Wynberg Population Indices (source: Barbour, 2024)	
Table 8. Plumstead Employment Indices (source: Barbour, 2024)	
Table 9. Wynberg Employment Indices (source: Barbour, 2024)	73

Table 10: Socio-economic aspects of the proposed development80Table 11. Noise survey results (source: Soundscape, 2025)91Table 12. Impact Assessment Scenarios92Table 13. Expected daytime rating levels at receptors92Table 14. Expected night-time rating levels at receptors93Table 15. Existing Capacity Analysis at South Road / Kent Road / Pluto Road intersection (HHO, 2023)94Table . Summary of impacts for Planning, Design and Development Phase159Table . Summary of impacts for Operational Phase160Table . Impact management objective and outcomes163Table : Suggested EA Approval Periods165

# **ATTACHMENTS**

**Note:** The Appendices must be attached to the BAR as per the list below. Please use a  $\checkmark$  (tick) or a x (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			√ (Tick) or x (cross)
	Maps		
Appendix A:	Appendix A1:	Locality Map	✓
	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning  Not applicable.	Х
	Appendix A3:	Map with the GPS co-ordinates for linear activities	✓
	Appendix B1:	Site development plan(s)	✓
Appendix B:	Appendix B2	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred	<b>✓</b>

		site, indicating any areas that should be avoided, including buffer areas;		
Appendix C:	Photographs	✓		
Appendix D:	Biodiversity overlo	Biodiversity overlay map		
		se(s) / exemption notice, agreements, comments ans of state and service letters from the municipality.	s from State	
	Appendix E1:	Final comment/ROD from HWC. Note: HWC response to NID included within Appendix	Х	
	Appendix E2:	Copy of comment from Cape Nature	X	
	Appendix E3:	Final Comment from the DWS	Х	
	Appendix E4:	Comment from the DEA: Oceans and Coast	N/A	
	Appendix E5:	Comment from the DAFF	Х	
	Appendix E6:	Comment from WCG: Transport and Public Works	Х	
	Appendix E7:	Comment from WCG: DoA	N/A	
Appendix E:	Appendix E8:	Comment from WCG: DHS	Х	
	Appendix E9:	Comment from WCG: DoH	Х	
	Appendix E10:	Comment from DEA&DP: Pollution Management	Х	
	Appendix E11:	Comment from DEA&DP: Waste Management	Χ	
	Appendix E12:	Comment from DEA&DP: Biodiversity	Х	
	Appendix E13:	Comment from DEA&DP: Air Quality	Χ	
	Appendix E14:	Comment from DEA&DP: Coastal Management	N/A	
	Appendix E15:	Comment from the local authority	Х	
	Appendix E16:	Confirmation of all services (water, electricity, sewage, solid waste management)  Please note: The latest capacity letters to be included in the Final BAR	<b>√</b>	

	Appendix E17: Comment from the District Municipality		N/A	
	Appendix E18:	Copy of an exemption notice	N/A	
	Appendix E19	Pre-approval for the reclamation of land	N/A	
	Appendix E20:  Proof of agreement/TOR of the specialist studies conducted.  Please note: This is included within the body of		<b>√</b>	
	Appendix E21:	each specialist report in Appendix G.  Proof of land use rights	<b>√</b>	
	Appendix E22:	Proof of public participation agreement for linear activities	PPP strategy was put forward in the NOI submitted to the DEA&DP	
Appendix F:	I&APs, the comme	Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.		
Appendix G:	G4) Noise Impact G5) Heritage Impo G6) Terrestrial biod G7) Aquatic biodi G8) Geotechnica	Assessment Assessment nic Impact Assessment Assessment act Assessment diversity compliance statement versity compliance statement	✓	
Appendix H:	EMPr			
Appendix I:	Screening tool rep	Screening tool report		
Appendix J:	The impact and ris	The impact and risk assessment for each alternative		
Appendix K:	terms of this Depar	Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline		
Appendix	Any other attachn appendices	nents must be included as subsequent	below.	

Appendix L:	Application Form	<b>✓</b>
Appendix M:	Site Sensitivity Verification Report	✓
Appendix N:	Draft Landscape Plan	✓
Appendix O:	Property Information	✓
Appendix P:	Recommendation from the Executive Mayor together with the Mayoral Committee: 5 March 2019 - MC 13/03/19 Approval of the Trunk Route Alignment for the Portion of Route T11, From Strandfontein Road to Wynberg	<b>√</b>
Appendix Q:	Methodology for Determining Impact Significance	<b>✓</b>

# SECTION A: ADMINISTRATIVE DETAILS

	CAPE TOWN OFFICE: REGION 1  GEORGE OFFICE: BEGION 3			
Highlight the Departmental Region in which the intended application will fall	(City of Cape Town, West Coast District	(Cape Wineland & Overberg Dis		(Central Karoo District & Garden Route District)
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	City of Cape Town: Urban Mobility Directorate represented by Ms. Michelle Durnez			
Name of contact person for Applicant/Proponent (if other):	HHO Consulting Engineers represented by Mr. Paul Faria			
Company/ Trading name/State Department/Organ of State:	HHO Consulting Engineers Pty (Ltd)			
Company Registration Number:	N/A			
Postal address:	14 <sup>th</sup> Floor, The Towers South, 2 Hertzo			
Telephone:	Cape Town (021) 425 2870	(	Postal code Cell: N/A	e: 8001
E-mail:	paul@hho.co.za	ſ	Fax: N/A	
Company of EAP:	Chand Consultants  Ms. Ingrid Eggert (Registered EAP)			
EAP name:				
Postal address:	Block A, Plum Park, 4 St. Clair Road, F		Dostal and	. 7001
Telephone:	·		Postal code Cell: N/A	e: 7801
E-mail:	info@chand.co.za		Fax: (086) 6	65 7430
Qualifications:	Ms Ingrid Eggert  BA Environmental Management (University of South Africa)  Ms. Michelle Lee  BSc. Biological Sciences (UCT)  BSc. (Hons) Marine Sciences (UCT)			
EAP registration no:	Ms. Ingrid Eggert – 2019/805 Ms. Michelle Lee – 2021/4150 (Candi	date EAP)		
Duplicate this section where there is more than one	City of Cape Town: Property Management  Property.management@capetown.gov.za			
landowner Name of landowner:	Note that there are many affected erven along the route given its linear nature. Most of the properties are however owned by the City of Cape Town who is the Proponent. Refer to <b>Appendix O</b> for a list of landowners.			
Name of contact person for landowner (if other):	Please refer to <b>Appendix O</b> for a list of	of landowners and o	contact info	ormation.
Postal address:  Please refer to <b>Appendix O</b> for a list of landowners and contact information in the landowners and contact in the landow				
Telephone:	Please refer to <b>Appendix O</b> for a list and contact information.	at of landowners of	Cell: Please	e refer to <b>Appendix O</b> of landowners and
E-mail:	Please refer to <b>Appendix O</b> for a list and contact information.	st of landowners	Fax: N/A	
Name of Person in control of the land:	City of Cape Town: Urban Mobility D  Ms. Michelle Durnez	irectorate		
Name of contact person for person in control of the land:	Civic Centre, 12 Hertzog Boulevard			
Postal address:	Cape Town Postal code: 8001			s· 8001
Telephone:	N/A		Cell: 073 27	
E-mail:	Michelle.durnez@capetown.gov.za		Fax: N/A	

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	City of Cape Town: Southern Region (Plumstead and Cape Flats District)		
Contact person:	Mr. Andy Greenwood (Head of South)		
Postal address:	Plessey Building, c/o Main and Victoria Roads		
	Plumstead, Cape Town	Postal code: 7801	
Telephone	(021) 444 8896	Cell: N/A	
E-mail:	Andrew.greenwood@capetown.gov.za	Fax: (021) 444 3802	

# SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INLCUDED IN THE APPLICATION FORM

1.	Is the proposed development (please tick):	New		Expansion	✓
2. Is the proposed site(s) a brownfield of greenfield site? Please explain.					
<b>Provinced site.</b> The site forms part of an existing road network that has existed since the early 1900's and extends into existing					

**Brownfield site** – The site forms part of an existing road network that has existed since the early 1900's and extends into existing residential and commercial properties. There are streetlights, stormwater drains and electrical poles/lines visible along the roads. Underground service infrastructure is assumed given the urban context. There is little vegetation within the proposed route as the site is transformed. The ground cover is either tar, pavement, soil/sand, or grass. While the site extends into some open spaces, these have been extensively transformed. The site is therefore considered a brownfields site.

been extensively transformed. The site is therefore considered a provinting site.				
3.	For Linear activities or developments			
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:			
Please refer t	Please refer to <b>Appendix O</b> for a list of the affected properties.			
3.2.	Development footprint of the proposed development for all alternatives.	~50606m² (~5.06 ha)		

The proposed development would entail the demolition of existing properties, the construction of a railway crossing bridge and the expansion of an existing roadway.

The total development footprint for the construction and expansion has been calculated as ±50 606m<sup>2</sup> (HHO Consulting Engineers, 2023).

Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.

# Background:

The Metro South East South Road Scheme (known as the IRT W8) is a critical component in completing the Wynberg leg of the IRT Phase 2A corridor, linking the M5 Kromboom Parkway in the east to the M4 Main Road in the west. It is situated between two approved IRT Phase 2A work packages—W5 (M68 Ottery Road) to the east and W6 (Wynberg Couplet) to the west. The scheme has been under independent consideration as part of the City of Cape Town's broader road upgrade initiatives since before the IRT was conceptualized.

The Lansdowne-Wetton Corridor (LWC) road scheme was originally approved by Council in October 2011 as part of the broader planning and design approval for IRT Phase 2. A route alignment options analysis for the Wynberg leg of the LWC trunk route was completed in 2014, and its findings were incorporated into the approved 2032 IPTN plan in June 2014. Public participation with affected communities was conducted between October 2014 and July 2015. However, prior to the commencement of this process, City tenants of South Road CCT owned properties that overlap the IRT W8 construction corridor were issued termination notices, prompting the Wynberg Residents' & Ratepayers Association (WRRA) and the South Road Families Association (SRFA) to file an urgent application with the Western Cape High Court on 26 March 2015. The court ruled in favour of WRRA and SRFA on several key issues, particularly emphasizing the City of Cape Town's obligation to conduct meaningful public participation for Phase 2A. As a result, all work on South Road was suspended on 1 April 2016. The City appealed the High Court ruling, and on 10 February 2017, the appeal was upheld in favour of the City. To address concerns raised, the City commissioned a peer review of the Wynberg leg's routing options, conducted by PricewaterhouseCoopers. Following various assessments and reports, the Council approved the Ottery/South Road alignment on 28 March 2019. This alignment was recommended based on its ability to meet BRT needs while addressing road network deficiencies and minimizing property acquisitions compared to the Wetton Road alternative.

From a strategic road network perspective, the proposed development is essential for establishing a critical east-west connection in the southern Wynberg area and across the railway line, ensuring continuity with the proclaimed South/Constantia Road link west of Main Road. This road link is required independently of the IRT trunk alignment.

# PLEASE NOTE: THE BELOW PROJECT DESCRIPTION IS FOR THE PREFERRED ALTERNATIVE

The City of Cape Town intends to develop a network of routes in which public transport bus services can operate. This is referred to as the Metro South East Corridor (MSEC) (formerly known as the Integrated Rapid Transport (IRT) Phase 2A).

This application is limited to Work Package W8 of the larger MSEC project, which would connect Wynberg Main Road in the west to the M5 Interchange in the east, via South Road (**Figure 1**).

The proposed scope includes the following:

- The existing section of South Road would be extended westwards by ±265m in order to connect to Wynberg Main Road via a newly constructed bridge over the railway line and Waterbury Road.
- The intersection between Prince George Drive, Rosmead Avenue, Ottery Road and South Road would be re-aligned and upgraded/widened.
- Sections of Wynberg Main Road, Prince George Drive, Ottery Road, Rosmead Avenue and Pluto Road will also be upgraded / widened.
- The inclusion of two dedicated bus lanes and additional vehicular use lanes along the entire route.
- New bus station located at the Pluto Road intersection;;
- Provision of improved non-motorised transport (NMT) routes;
- Development of a bridge to cross the railway line (refer to Error! Reference source not found.);
- A road shoulder;

- Parking areas;
- Hard and soft landscaping using indigenous plant species and retaining, where possible, existing trees.
- Service infrastructure:
  - Stormwater interventions on site will cater for the minor (1:5 year) and major (1:10 year) storm recurrence return periods and will entail a network of concrete collector pipes, new catchpits, and the relocation of existing catchpits and manholes, all of which will integrate with the existing stormwater infrastructure.
  - The existing street lighting along the proposed roadway will be removed and replaced with new infrastructure.
  - A range of overhead and underground services (electrical, water, sewage, stormwater, telecommunication) are present within the site boundary. Accordingly, appropriate provisions must be made for the removal, relocation, upgrade (where necessary) or protection of existing infrastructure, including electrical, telecommunication, water, and sewer services. These will however all be within the development footprint being applied for or within existing road reserves.

None of the proposed service infrastructure (pipelines, transmission lines etc.) meet the thresholds considered in the respective Listed Activities.

The typical cross section for the route will comprise a 3.5m bus lane, 3.4m general traffic lane and 1.5m shoulder on either side. The NMT is made up of a 2m wide sidewalk and 1.8m wide dedicated cycle lane on both sides. The route and road extent are depicted in **Figure 1** below. Site Plans are included in **Appendix B**1 and **Appendix N** for the draft Landscaping Plan.

The proposal will necessitate:

- Acquisition of approximately 22 privately owned properties along the route;
- Demolition of a number of existing structures (Figure 2 and Figure 3);
- The permanent or partial closure of certain roads / intersections for vehicles (Table 1).

Table 1: Proposed permanent or full road closures along the IRT W8 route.

Affected Road Intersections	Closure	Impact
Waterbury Road and Main Road	Full	No direct access between Waterbury Road and Main Road.
Ashbury Road and South Road	Full	No direct access between Ashbury road and South Road.
Honitan Road and South Road	Full	No direct access between Honitan Road and South Road.
Chudleigh Road and South Road	Partial	Left-in left-out access only to Chudleigh Road from South Road.
Batts Road and South Road	Full	No direct access between Batts Road and South Road.
Stella Road and South Road	Full	No direct access between Stella Road and South Road.
Lympleigh Road and South Road	Full	No direct access between Lympleigh Road and South Road.
Sussex Road and South Road	Full	No direct access between Sussex Road and South Road.
Rotherfield Road and South Road	Full	No direct access between Rotherfirled Road and South Road.
Pluto Road and South Road	Full	No direct access between Pluto Road and South Road
Woodley Road and South Road	Full	No direct access between Woodley Road and South Road.
Milford Road and South Road	Partial	Left-in access only to Milford Road from South Road. No access to South Road from Milford Road.

Platoon Road and South Road	Full	No direct access between Platoon Road and South Road.
Evremonde Road and South Road	Full	No direct access between Evremonde Road and South Road.
Troop Road and South Road	Full	No direct access between Troop Road and South Road.
Churchill Road and South Road	Full	No access to Ottery Road and South Road via Churchill Road.
Napier Road and Ottery Service Road	Full	No direct access between Napier Road and Ottery Service Road.
Portswood Road and Ottery Service Road	Full	No direct access between Portswood Road and Ottery Service Road.



Figure 1: Locality Map for the proposed IRT W8 route (Created using Google Earth Pro, 2025).



Figure 2: Existing buildings within the road envelope to be demolished - western portion (source : HHO Conceptual Design Review Report, August 2023)



Figure 3: Existing buildings within the road envelope to be demolished – eastern portion (source : HHO Conceptual Design Review Report, August 2023)

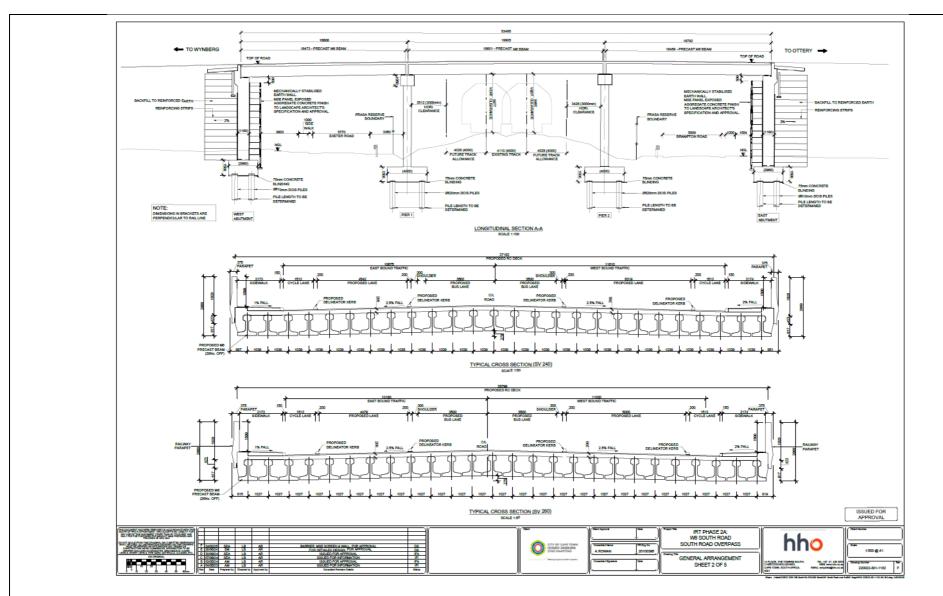


Figure 4: Typical cross section for bridge structure (rail overpass) (source: HHO, 2025)



Figure 5: Conceptual view of three-span bridge (road-over-rail) (source : HHO Conceptual Design Review Report, August 2023)

Table 2: Geometric Engineering Design Considerations & Traffic and Bus Operations Specifications (source: HHO Conceptual Design Review Report, August 2023)

Parameter	Specifications					
Road Reserve Width	32 - 40m					
Overpass	The overpass bridge structure is proposed to have an approximate length 54,2m and width 26,4m. It is proposed to be a three-span structure with two closed wall abutments and two open column piers with both the abutments and piers supported by piled foundations. The approach embankments will be retained and could comprise tiered or interlocking reinforced concrete blocks, mechanically stabilised earth panels, sloped reinforced concrete walls or stone-clad concrete walls.					
On Street Arrangement Median width Lane width Shoulder width Parking width	0.8 - 5m 3.4 - 3.7m 1.5m - 3m 2.5m					
NMT Total Width Pedestrian footway Cycle facility	1.8 - 3m ≥1.8m 1.2 - 1.5m					
Design Speed	60 km/h					
Vertical Bridge Clearance	≥5.2m					
Retaining walls	Significant retaining structures might be required at the railway underpass. This design is to meet the relevant SANS and CC specifications.					
Infrastructure deviation / relocation design	Existing services may require relocation or rerouting pendir the final geometry of the W8 route.					
Drainage	A stormwater management plan for the route is to be completed in line with the CCT's "Management of Urban Stormwater Impacts" policy.					

Dedicated bus lanes	<ul> <li>In both directions in the median.</li> <li>Lane widths to conform to BRT Guide (Min 3.5m).</li> <li>Self-enforcing physical separation required.</li> <li>Red colourisation of concrete required.</li> </ul>					
	Peak hour bus flow of 49 buses per direction (12m and 18m buses).					
Station/Stop	<ul> <li>Open median stops at Sussex to be provided for 2027 &amp; ultimate.</li> <li>Passing lane to be provided in each direction. if possible, 1 platform per direction</li> </ul>					
Cycle ways	3m facility or shoulder (cycle lane) in the road plus 2m sidewalk, on each side of the road					
General traffic lanes	<ul> <li>Minimum of one lane per direction - Main Road to Kent Rd.</li> <li>Two lane per direction - Kent Rd to Prince George Drive.</li> </ul> Lane widths to conform to CoCT Geometric Design Guidelines					
Service Road	Access to properties off old South Road to be rationalised and provided for.					
Intersection openings (all signalised)	Prince George Drive Kent/Pluto Main Road Dedicated right turn lanes to be provided for general traffic at each intersection.  Intersections to be designed to SARTSM standards &					
	specifications.					
Intersection bus movements to be accommodated	Main Road – movements to and from New South Road bus lanes. Prince George Drive/Rosmead Avenue – through movement From Ottery Road east to New South Rd – right turn movement from Ottery Road east to Ottery Rd west.					
	Bus movements to be accommodated at reasonable to high levels of service (LOS B/C).					

# **Encroachment into Public Open Spaces**

Approximately thirty five Public Open Spaces (OS2) would be encroached upon by proposed road widening and associated activities. These areas have a split zoning of OS2 and Transport 2 as they have long been earmarked for this road upgrade. The affected properties will be encroached upon by > 4m, as shown in **Table 3** below.

Table 3: Extent of Proposed Widening into Public Open Space Zoned Properties

Erf no. & address of Public Open Space property	Maximum extent of widening into Public Open Space (measured using CCT EGIS- Zoning Viewer)	Image reference showing extent of encroachment
(it is however noted that roadway has already been built across this property where it is zoned as OS2)	±6.9 m	

Erf 71840-RE	±9.2m	
		De Bo,
Erf 71841 -RE	±7.9m	
Erf 71842-RE	±6.3m	TOTAL SRI
Erf 71835 – RE (noting that there is an existing house where OS2 is located)	±15.9m	TRES TRES TRES TRES TRES TRES TRES TRES
Erf 71817	±8.9 m	7010 TR2 9 9 1702 1702 1702 1702 1702 1702 1702 1702
Erf 71816	±11.1 m	TR2 ON
		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Erf 71801 -RE	±5.8 m	SR1 TR2 6
Erf 71802	±15.8 m	7 SR1 71514 SR1
Erf 71780 - RE	±6.8m	65 THE TOTAL
Erf 71781 - RE	±3.6 m	65 TATE TR2 TR2 TR2 TR2 TR2 TR2 TR2

Erf 71762-RE	±3.5 m	
EII / 1/02-RE	25.5111	71722-RE CS2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Erf 71760-RE	±14 m	THE THE THE PARTY OF THE PARTY
Erf 71749-RE	±9.4 m	TO SRI
Erf 70705	±7.7m	SS 88 61 TR2 2
Erf 70703-RE	±15.4m	93 TR2
Erf 70702	±15.4m	
Erf 70701	±15.2m	SOLO SOLO SERIES
Erf 70700	±15.6m	SRI SRI SRI
Erf 70699-RE	±15.6m	SRI SRI
Erf 70715	±13.8m	
Erf 70094	±16.6m	
Erf 70093	±17.2m	
Erf 70092	±16.2m	
Erf 70091	±14.m	GRO GRO
Erf 70090- RE	±12.7m	Market 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Erf 70089	±11.8m	
Erf 70088	±10m	182 TR2 TR2 TR2 TR2 TR2 TR2 TR2 TR2 TR2 TR
Erf 70087	±8.6m	55 TR2
Erf 70086	±7.3m	TR2 T08
Erf 70085-RE		
Erf 70084	±6.9m	
Erf 70082-RE		
Erf 70083	±7.2m	
Erf 74247	±2.4m	
3.4.		the proposed routes will be obtained for all alternatives.
he site is an e	existing road with existing  SG Digit	access routes.
	SG Digit codes of the	Discussive founds Appropriate Officer with a filter wife.
3.5.	Farms/Farm Portions/Erf numbers	Please refer to <b>Appendix O</b> for a list of the affected properties.

numbers

	for all alternatives											
3.6.	Starting point co-ordi	nates for all alternativ	es									
	note: The Preferred Alternativ			ame footpr	int							
	Latitude (S) 34° 0' 57.19"											
	Longitude (E)	18°		28'			E	5.72"				
	Middle point co-ordin	nates for all alternative	es				<u>l</u>					
	Latitude (S)	34°		0,			Ę	54.60	11			
	Longitude (E)	18°		28'			3	34.95	11			
	End point co-ordinate	es for all alternatives		•								
	Latitude (S)	34°		0,			4	46.18				
	Longitude (E)	18°		29'			1	1.22"				
	r Linear activities or develop		0m, a map i	ndicating th	ne co-ordi	nates for	ever	y 100	m aloi	ng the	route	must
4.	Other developments		e developm	nent is linea	<u> </u>							
4.1.			10 40 (010)	10111 10 11110 01	<u>'</u>							m <sup>2</sup>
4.2.												
4.2.		Developed footprint of the existing facility and associated infrastructure (if applicable):  Mevelopment footprint of the proposed development and associated infrastructure size(s) for all					<del>M</del> ≠					
4.3.	alternatives:	<del>пгогие ргорозеа ас</del>	<del>меюрттетт</del>	<del>ana associa</del>	<del>area iriiras</del>	<del>IIUCIUIE :</del>	<del>SIZO (S</del>	<del>  10</del> H	<del>UII</del>			m <sup>2</sup>
4.4.	Provide a detailed de of e.g. buildings, struc											<del>stails</del>
4.5.	Indicate how access	to the proposed site(s	s) will be obt	tained for a	II alternati:	<del>VOS.</del>						
4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:											
	Coordinates of the pr	roposed site(s) for all a	alternatives:									
4.7.	-Latitude (S)		0	÷ <u>i</u> <u>ii</u>					11			
	-Longitude (E)				<u>i</u>			44				

# SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

### 1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include	YES	NO
a copy of the exemption notice in Appendix E18.	+E3	NO

# 2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.  Not applicable. The project is not located along the coastline and there will be no discharge to the sea.	YES	NO
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.  A Heritage Impact Assessment (HIA) that satisfies the provisions of Section 38(3) of the NHRA must be submitted.	YES	NO
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.  No watercourses are located within 100m of the proposed development. Additionally, no natural wetlands are impacted within 500m of the development.	¥E\$	NO
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	¥ES	NO
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA"). Environmental Management: Biodiversity Act (NEMBA) and the revised list of threatened The National ecosystems have been and will continue to be consulted to determine the protected status of affected ecosystems. However, no permits under this Act will be required for the proposed road upgrade activities.	YES	<del>O</del> W
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	¥E\$	NO

# 3. Other legislation

List any other legislation that is applicable to the proposed activity or development.

- The Constitution (RSA 1996)
- City of Cape Town Municipal Planning Amendment By-law, 2016 (as amended) (Section 42(a) and (d))
- Occupational Health and Safety Act 85 of 1995 (OHS).
- Western Cape Noise Control Regulations (2013)- used in conducting the Noise Impact Assessment and compilation
  of the associated report.

# 4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.

The expansion of the MyCiTi Integrated Rapid Transit (IRT) system aligns with a range of national, provincial, and local policies aimed at fostering public transportation, economic growth, spatial transformation, and social inclusion. According to the National Development Plan 2030, the development of road infrastructure contributes to the broader goal of eradicating poverty and inequality through faster economic growth, higher investment, and job creation (Urban-Econ, 2024). This is supported by the Medium-Term Strategic Framework 2019-2024, which emphasizes the importance of promoting social cohesion and creating safer communities, thus aligning with the goal of fostering a sense of community and inclusion. Similarly, the National Spatial Development Perspective 2006 highlights the importance of focusing investment in areas with high economic potential, suggesting that the road network expansion should stimulate sustainable economic growth in key regions, attracting private-sector investments and creating long-term employment opportunities (Urban-Econ, 2024). The Integrated Urban Development Framework 2016 emphasizes the need for better spatial integration, which the MyCiTi system directly supports by improving connectivity between urban nodes, thereby enhancing accessibility and economic opportunities for residents in outlying areas (Urban-Econ, 2024).

At the provincial level, the Western Cape Provincial Strategic Plan 2019-2024 outlines key priorities, such as boosting the economy and job creation, which the proposed development directly supports through its focus on transportation

infrastructure, enhancing mobility, and providing better access to resources (Urban-Econ, 2024). The Western Cape Spatial Development Framework 2014 further complements this vision by advocating for clustering economic infrastructure along public transport routes, thereby optimizing the use of public investments and ensuring accessibility to employment and recreational facilities for more residents (Urban-Econ, 2024). At the local level, the City of Cape Town Integrated Development Plan 2022-2027 outlines the city's priorities, including economic inclusion, resource efficiency, and safe communities, all of which are supported by the proposed IRT system (Urban-Econ, 2024). The project will enable more efficient commuting, thus enhancing access to essential services and contributing to the overall well-being of residents (Urban-Econ, 2024).

The proposed Integrated Rapid Transit (IRT) system aligns with these objectives by facilitating efficient transportation, fostering community connectivity, and promoting economic opportunities, especially for the individuals from the Khayelitsha and Mitchells Plain planning district (Urban-Econ, 2024). It enhances access to essential services, educational institutions, and recreational facilities, thereby improving the quality of life for residents (Urban-Econ, 2024).

Moreover, the proposed development supports broader goals of spatial integration, economic transformation, and sustainable urban development, as articulated in the various policy frameworks. By prioritising investments in strategic areas and promoting inclusive growth, this project contributes to building inclusive communities. Essentially, the proposed network represents steps towards achieving the vision of prosperity, equity, and sustainability outlined in South Africa's development plans and local strategies (Urban-Econ, 2024).

Other policies considered include:

- City of Cape Town Municipal Spatial Development Framework ("CTMSDF") (January 2023)
- City of Cape Town Southern District Spatial Development Framework and Environmental Management Framework (2023).
- Environmental Strategy For The City Of Cape Town (Policy Number 46612)
- City of Cape Town Road Network: Public Right of Way-This document was used in the conceptualization of the proposal to confirm that no future road development has been planned in the immediate vicinity of the site.
- City of Cape Town Biodiversity Network (2017) and National Freshwater Ecosystem Priority Areas (NFEPA) used
  to guide identification of environmental sensitivities in this Basic Assessment process.

#### 5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.

- Guidelines on EIA Regulations 2012- These guideline documents guided the Basic Assessment process, noting that where relevant, allowance has been made to align with the 2014 EIA regulations.
- Guidelines on Public Participation 2012- These guideline documents guided the Basic Assessment process, noting that where relevant, allowance was made to align with the 2014 EIA regulations as well as necessary State of Disaster procedural requirements.
- Guideline for the Review of Specialist Input into the EIA process (June 2005)- this guideline has been applied in the compilation of this report and review and assimilation of specialist findings in that regard.
- Guideline for Environmental Management Plans (June 2005)- this guideline was considered when compiling the EMPr included in **Appendix H**.
- Guidelines on Alternatives (March 2013)- These guideline documents guided the Basic Assessment process, noting that where relevant, allowance was made to align with the 2014 EIA regulations.
- Guideline on Need and Desirability (March 2013). These guideline documents guided the Basic Assessment process, specifically in the information provided in this report pertaining to need and desirability, noting that where relevant, allowance was made to align with the 2014 EIA regulations.
- DEA's (now DFFE) Integrated Environmental Management Guideline on Need and Desirability (2017) informed the need and desirability discussion included in this report.
- City of Cape Town's Standard and Guidelines for Roads & Stormwater, Version 3.0 (February 2022) used within the geotechnical investigations conducted for the site.
- City of Cape Town's Standard Specifications for Steel Pipes (1993)
- Minimum Standards for Civil Engineering Services in Townships.
- Western Cape Government Access Management Guidelines (2020).

#### 6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form

In accordance with "The Protocols," a Screening Tool Report (STR) was generated for the site, and a Site Sensitivity Verification (SSV) exercise was conducted by the Environmental Assessment Practitioner (EAP). A report detailing these activities has been prepared. Please refer to **Appendix I** for the STR and **Appendix M** for the SSV Report.

The following protocols are relevant to the study:

- Site Sensitivity Verification Requirements Where A Specialist Assessment Is Required But No Specific Assessment Protocol Has Been Prescribed (Gn320, Gq 43110)
- Protocol For The Specialist Assessment And Minimum Report Content Requirements For Environmental Impacts
  On Terrestrial Biodiversity (Gn320, Gg43110)
- Protocol For The Specialist Assessment And Minimum Report Content Requirements For Environmental Impacts
  On Aquatic Biodiversity (Gn320, Gg 43110)
- Protocol For Specialist Assessment And Minimum Report Content Requirements For Noise Impacts (Gn320, Gg 43110)

The following specialist assessments were undertaken for this study:

- Social Impact Assessment;
- Visual Impact Assessment;
- Heritage Impact Assessment;
- Socio-Economic Impact Assessment;
- Noise Impact Assessment;
- Terrestrial Biodiversity Compliance Statement;
- Aquatic Biodiversity Compliance Statement; and
- Traffic Impact Report.

The following specialist studies were not undertaken within this study:

- Agricultural Impact Assessment;
- Geotechnical Assessment;
- Ambient Air Quality Impact Assessment;
- Plant Species Assessment; and
- Animal Species Assessment.

Please refer to **Appendix M** to view the Site Sensitivity Verification Report where the rationale for each study undertaken and not undertaken was provided.

# SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which the applicable listed activity relates.
Not applicable		
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 3	Describe the portion of the proposed development to which the applicable listed activity relates.
4	The development of a road wider than 4 metres with a reserve less than 13.5 metres.  Western Cape  (i) Areas zoned for use as public open space or equivalent zoning; (ii) Areas outside urban areas; (aa) Areas containing indigenous vegetation; (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or  (iii) Inside urban areas: (aa) Areas zoned for conservation use; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority	The South Road extension ("New South Road") which would run parallel to Waterbury Road is considered new roadway with a reserve ranging between 32 – 40m in width. This section of new road will encroach into properties with a dual zoning of OS2 and Transport 2.
18	The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.  Western Cape  (i) Areas zoned for use as public open space or equivalent zoning.  (ii) All areas outside urban areas:  (aa) Areas containing indigenous vegetation;  (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or  (iii) Inside urban areas  (aa) Areas zone for conservation use; or  (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	The affected roads will be widened by more than 4 m, into some properties which have a split zoning for transport as well as Public Open Space.

- The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted.
- Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority.

NOTE: As indicated in the project description, the service infrastructure falls below the thresholds considered in related Listed Activities and these are located within the urban area.

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Category A	Describe the portion of the proposed development to which the applicable listed activity relates.				
Not applicable. The proposed development is not anticipated to trigger any waste management activities as defined within the National Environmental Management: Waste Act, 2004 (Act No. 59 of 2008).						

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):		Describe	the	portion	of	the	proposed
	Provide the relevant Listed Activity(ies)	developm	ent to	which	the	applic	able listed
		activity rel	ates.				

Not applicable. The proposed development is not anticipated to generate any emissions triggers as defined within the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004).

#### SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1. Provide a description of the preferred alternative.

#### PLEASE REFER TO SECTION B3.3 ABOVE FOR A DETAILED DESCRIPTION OF THE PREFERRED ALTERNATIVE

The City of Cape Town proposes the development of the Integrated Rapid Transit (IRT) System as part of the Metro South East Corridor (MSEC), with several routes identified for initial development, including Section W8. This section will connect Wynberg Main Road in the west to M5 Interchange in the east via South Road, which will be extended westwards by approximately 265m to connect to Wynberg Main Road via a newly constructed bridge over the railway line. The project involves upgrading and realigning the intersections at Prince George Drive/Rosmead Avenue, Ottery Road, and South Road. The road upgrades will include widening existing roads to accommodate two dedicated bus lanes along South Road, extending approximately 1470m (one lane per direction), additional vehicular lanes, and improvements for non-motorised transport (NMT), such as pedestrian footways and dedicated cycle lanes. A new bus station will be developed at the Pluto Road intersection, and a bridge structure will be constructed to cross the railway line.

As part of the development, certain existing buildings will be demolished, and road closures will be implemented to facilitate the new alignment. Several roads will be fully or partially closed to vehicular traffic to accommodate the IRT route. The project also includes improved street lighting, landscaped areas, parking, and retaining structures where necessary. Given the existing stormwater constraints in the area, a stormwater management plan will be implemented, incorporating new drainage infrastructure, such as concrete collector pipes, relocated catchpits, and manholes, integrated with the existing system. The drainage system will also include overland escape routes to mitigate flooding risks, particularly in areas where the new alignment creates trapped low points.

Additionally, existing services such as electrical, telecommunication, water, and sewer infrastructure within or adjacent to the road reserve will require removal, relocation, or protection as part of the project. Streetlights along the upgraded route will be replaced with energy-efficient LED lights. The project aims to improve public transport efficiency, enhance road safety, and integrate various transport modes while ensuring sustainable urban infrastructure development.

2. Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.

Most of the proposed IRT bus upgrades/road widening would occur within the area zoned for transport use.

The proposal will extend beyond the existing road reserve into residential, Community 1, OS2 and Transport zoned properties.

A separate rezoning process will be undertaken in terms of the City of Cape Town municipal planning amendment by-law, 2016 to obtain the required land-use rights.

3. Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.

To the knowledge of the EAP and applicant, there are no environmental approvals attached to the road and road reserve where development would occur.

A separate town planning process will deal with any other land-use approvals still required to allow for widening into adjacent properties which are not zoned for transport use.

4. Explain how the proposed development will be in line with the following?

4.1 The Provincial Spatial Development Framework.

The PSDF significantly and consistently promotes the establishment of a sustainable public transport system. A key component of such a system is the metro-wide IRT network, The proposed development would serve to expand on the existing IRT network, by providing a much-needed service to previously segregated communities.

The project aligns with the following two Spatial Policies as defined in the PSDF:

#### **S2: IMPROVE INTER AND INTRA-REGIONAL ACCESSABILITY**

The MSEC network will provide a bus route that connects the Metro Southeast with the main economic nodes of the City, including those of the Southern Suburbs. It provides a safe, reliable and affordable travel option to other areas in the metropole and beyond.

# S4: BALANCE AND COORDINATE THE DELIVERY OF FACILITIES AND SOCIAL SERVICES

The new bus route can provide better access to essential services such as hospitals, schools, and government offices, especially for those living in previously underserved areas. This improves the overall accessibility of social services, ensuring more equitable service delivery across different regions. Improved transportation links can help reduce social isolation by making it easier for individuals to participate in community activities, access social services, and connect with support networks.

Furthermore, the PSDF is guided by a number of plans relevant to the proposed development:

- National Development Plan (NDP) Which identifies infrastructure as essential for development. It aims to eradicate poverty and reduce inequality by 2030 through several key strategies:
  - Uniting South Africans around a common program for prosperity and equity.

- Promoting active citizenry to strengthen development, democracy, and accountability.
- Driving faster economic growth, higher investment, and greater labor absorption.
- Focusing on key capabilities of people and the state.
- Building a capable and developmental state.
- Encouraging strong leadership to address societal challenges.

The National Development Plan under the improvement of infrastructure is to roll out a public transport system in order to better link rural and urban nodes and provide people with better, quicker, safer access to their places of work and education. The emphasis on economic growth and investment in the NDP suggests that road development projects, such as the proposed expansion of the MyCiTi IRT system, should contribute positively to the economic landscape by attracting investments and creating job opportunities (Urban-Econ, 2024).

- OneCape2014. Two key transition requirements identified in the OneCape2014 vision would be partially addressed
  through the implementation of the proposed development, namely economic access and settlement transition. These
  transitions would serve to provide greater economic access to all people as well as access from various settlement
  areas to urban nodes.
- Western cape Provincial Land Transport Framework, 2013 (PLTF). sets out a long-term vision for transport in the
  western cape. The PLTF's targets are that by 2050 the transport system in the Western Cape will have:
  - Fully integrated rapid public transport networks (IRPTN) in the higher-order urban centres of the province.
  - Fully integrated public transport networks (IPTN) in the rural regions of the province.
  - A safe public transport system.
  - A well-maintained road network.
  - A sustainable, efficient, high-speed, long-distance rail network (public and freight transport) with links to the Northern Cape, Gauteng and the Eastern Cape.
  - An efficient international airport that links the rest of the world to the choice gateway of the African
    continent.
  - International-standard ports and logistics systems.
  - A transport system that is resilient to peak oil.

The following guiding principles of the PSDF are relevant to the proposed development and would be partially realised through the implementation thereof:

- **Spatial justice** past spatial and other development imbalances should be redressed through improved access to and use of land by disadvantaged communities. This will allow for urban opportunities to be accessible by all.
- **Spatial efficiency** residential areas close to work opportunities as opposed to dormitory settlement, and prioritisation of public transport over private car use. When a settlement is compact, the higher densities meet thresholds to support viable public transport, reduce overall energy use, and lower user costs.
- Accessibility- improving access to services, facilities, employment, training and recreation, and safe and efficient transport modes is essential to achieving the stated settlement transitions of the NDP and OneCape 2040. Good and equitable access systems must prioritise the pedestrian, as well as provide routes for bicycles, prams, wheelchairs and public transport.

One of the expressions of the spatial vision of the PSDF is to connect the Cape and ensuring that urban and rural communities are inclusive, integrated, connected and collaborative.

A priority is the establishment of an access system within and between functional regions. The strengthening of functional linkages and transport connections between rural settlements and regional service centres is also critical to ensure spatial integration and associated economic resilience at all scales. The spatial agenda of the PSDF is to use infrastructure investment as a primary lever to bring about the required urban and rural spatial transitions and the agenda encompasses the following:

- Aligning infrastructure, transport and spatial planning, the prioritisation of investment and on the ground delivery.
- Using public transport and ICT networks to connect markets and communities.

With respect to the ecological goals of the PSDF, there are no sensitive areas along the route which will be encroached upon.

This activity aligns with the Provincial Spatial Development Framework as development activities will create job opportunities within the regional environment. Additionally, during the operational phase, the increased foot traffic due to better transportation options can stimulate local businesses, leading to economic growth and the development of community services. By connecting residential areas with commercial and industrial zones, the development will make it easier for residents to reach job opportunities, thereby supporting economic stability and social well-being.

# 4.2 The Integrated Development Plan of the local municipality.

The proposed development aligns closely with the City of Cape Town's Integrated Development Plan (IDP) by advancing the municipality's strategic goals in sustainable urban mobility, social inclusion, and environmental sustainability. The project aligns with the following strategies as defined in the City of Cape Town's IDP:

#### STRATEGY 1: ECONOMIC GROWTH

• The proposed development seeks to connect residential areas with business districts, industrial zones, and other employment hubs, facilitating easier access to workplaces. This is expected to contribute to lower unemployment rates and a more stable workforce.

- By improving transportation options, individuals will have access to job opportunities that were previously out of reach
  due to distance or limited transport, leading to higher employment rates and more efficient job matches.
- The new route will encourage increased foot traffic to local shops, restaurants, and service providers along the proposed route, as people use the bus stops. This is anticipated to boost the customer base and revenue for local businesses along South Road.
- A smaller percentage of disposable income needs to be spent on transport.

#### STRATEGY 6: TRANSPORT

- Provision of sustainable, efficient, safe, and affordable travel options for all.
- The enhancement of public transport infrastructure in order to reduce reliance on private vehicles. The inclusion of dedicated bus lanes, improved intersections, and upgraded road infrastructure directly contributes to the City's vision of developing a multi-modal transport network that improves accessibility and mobility across the metro area. This initiative helps reduce congestion and emissions, in line with the IDP's goal to create a sustainable transport system.
- The creation of non-motorized transport (NMT) lanes along the route will ensure safe and high-quality roads for pedestrians, cyclists, and vehicles.
- A more spatially integrated and inclusive city: The new route will connect various neighbourhoods, especially those that are isolated or underserved, to the city's core and other key areas. This will enhance spatial integration by reducing physical barriers and fostering a more cohesive urban environment.

Furthermore, the project's focus on promoting public transport and non-motorised transport (NMT) aligns with the IDP's environmental sustainability goals. By encouraging the use of public transport, or walking and cycling, the development contributes to a greener urban environment, reducing carbon emissions and promoting sustainable mobility. Environmental management practices, such as addressing vegetation removal and stormwater runoff, ensure the project is environmentally responsible and in line with the IDP's goal of sustainable development.

#### 4.3. The Spatial Development Framework of the local municipality.

The proposed development aligns well with the City of Cape Town's Municipal Spatial Development Framework (MSDF) by contributing to the municipality's vision for integrated, sustainable, and equitable spatial planning. The project supports several key elements of the MSDF, particularly in relation to urban mobility, spatial integration, and sustainable development.

First, the development is closely aligned with the MSDF's goal of promoting integrated transport systems that facilitate greater accessibility and mobility. The creation of dedicated bus lanes, improved intersections, and the extension of South Road is a critical component to the completion of connectivity between key areas such as Khayelitsha, Mitchells Plain, and the Southern Suburbs. This will support spatial integration, particularly for historically disadvantaged communities. The improved transport corridor will create greater connectivity between these communities and economic hubs, essential services, such as employment opportunities, education, and healthcare, addressing the MSDF's goal of reducing spatial inequality.

The transport system aligns with the broader goals of reducing traffic congestion, carbon emissions, and the dependence on private vehicles., in direct support of the MSDF's objective to promote a more efficient, sustainable, and accessible transport network across the city.

Similar to the PSDF and the IDP, the project is also in line with the MSDF's emphasis on promoting sustainable development. The development of public transport infrastructure, alongside non-motorised transport (NMT) facilities such as pedestrian walkways and cycle lanes, will encourage environmentally friendly transportation options. This is aligned with the MSDF's vision for a greener, more sustainable urban environment, promoting active mobility and reducing vehicle emissions.

# Land use intensification premised on public transport

Transit-oriented development is the city's basis for land use intensification. It targets higher-density, mixed land use development in close proximity to existing or planned high capacity, high-quality public transport (MSDF, 2023). To address Cape Town's fragmented spatial form and inefficiencies, harness potential, mitigate negative trends, and optimise scales of efficiency associated with investment commitments, the city needs to consider property and development economics, land use, and transport in an integrated manner (MSDF, 2023).

# Integrated Public Transport Network (IPTN) Plan

The comprehensive integrated transport plan (under review) provides the strategic guidance framework within which the 2032 IPTN was developed. It outlines the strategic approach to designing an integrated public transport network for Cape Town that:

- Responds to the mobility needs of the future city;
- Achieves an appropriate mix of modes; and
- Provides a sustainable balance of adequate capacity and reduced travel time for all trips.

The approved 2032 IPTN Plan (currently being reviewed) was used as a basis for the MSDF. It encompasses rail-and road-based modes as well as proposals for improving non-motorised transport access and park-and-ride facilities at modal interchanges. It determines which modes are best suited to meet existing and future public transport demand, route descriptions and modal interchanges, station and stop locations, system operational parameters, infrastructure needs and estimates of total system costs (MSDF, 2023).

Passenger rail and BRT are bolstered by quality bus services and supplemented by improved demand-responsive minibus-taxi services as well as new-generation technological advancements (e.g. e-hailing), all of which come together to form an

integrated public transport system. These modes will also be complemented by improved provision of non-motorised transport (MSDF, 2023).

It is noted that the primary focus for short- to medium-term implementation is the T11/T12 trunk routes, which form the Metro South-East MyCiTi public transport corridor, with different segments currently in various stages of completion (MSDF, 2023). The site is situated within a Development Focus Area and is demarcated as "Metro South East MyCiTi Corridor" and is mostly located within an urban node (refer to **Figure 6**, **Figure 7** and **Figure 8**). The W8 project is directly aligned with the intended expansion of the road to create a MyCiTi network in the area.

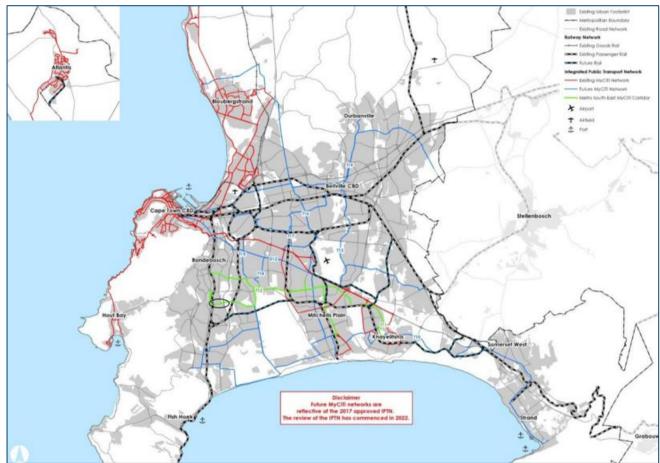


Figure 6: Integrated public transport network. Site Location within the MSDF – circled in black (extracted from City of Cape Town MSDF, 2023)

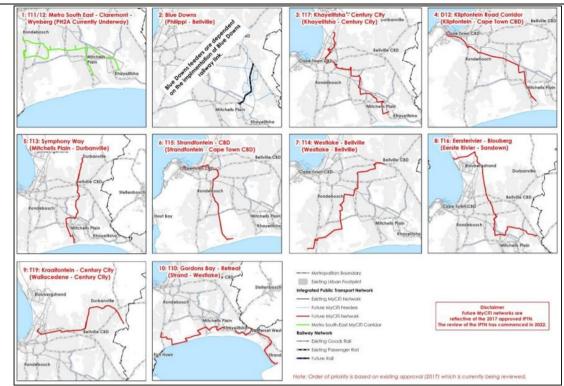


Figure 7: Future Bus Rapid Transport Trunk Routes – MSE Corridor within the MSDF demarcated in red (extracted from City of Cape Town MSDF, 2023).

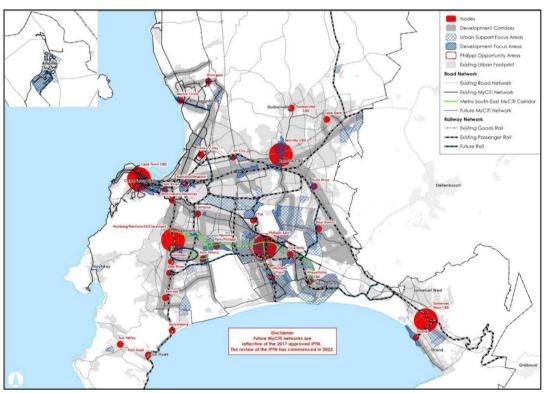


Figure 8: Conceptual development corridors and urban nodes. Site Location within the MSDF is circled in black (extracted from City of Cape Town MSDF, 2023).

# MSDF Policy Statements

The purpose of the policy statements is to provide guidelines regarding the appropriate nature, form, scale and location of development. The MSDF includes a set of policy statements to guide the implementation of the MSDF's spatial strategies. The following policies are relevant to the proposed IRT development on the site:

# Spatial Strategy 1: Plan for employment and improve access to economic opportunities

Sub-Strategy: Integrate land use, economic activities and transport planning that support the sustainable operation of the public transport network.

Policy 6	Plan and prioritise for the expansion of the integrated public transport service, informed by the Integrated Public Transport Network (IPTN) and the City's Integrated Transport Plan (CITP).
Policy 7	Plan and implement sustainable, high quality and human-scale public realm in and around transit precincts. These precincts must be legible and accessible to all and include universal access and non-motorised transport facilities and a public environment that is vibrant, inclusive and safe.

4.4. The Environmental Management Framework applicable to the area.

No portions of the route fall within any sensitive areas as identified in the SDF. The site is demarcated "existing urban footprint" (refer to **Figure 9**). There are no areas that fall within the Cape Town's Biodiversity Network which would be encroached upon.



Figure 9: MSDF Biodiversity Network (extracted from City of Cape Town MSDF, 2018)

5. Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.

The botanical and freshwater specialists identified no sensitivities or development constraints within the footprint of the preferred alternative. General mitigation measures recommended by the specialists have been incorporated into the EMPr for implementation.

Comments from relevant authorities will be considered following the distribution of this DBAR. This section will be updated in response to the feedback received.

6. Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.

The proposed site is not located within any Critical Biodiversity Areas (CBA), Ecological Support Areas (ESA) or other areas warranting conservation in terms of biodiversity objectives. Furthermore, the site is not located within any Protected Areas as defined by NEMA, Cape Nature or SANBI. Please refer to **Figure 10** below and **Appendix D**.

The WCBSP has thus not had a direct impact on the proposal in terms of the preferred road geometry but has corroborated the findings of the ecological specialists (NCC, 2023a and NCC, 2023b) who have provided input into this BAR (as discussed in other sections of this report).



Figure 10: Biodiversity conservation map indication no sensitivities located within the proposed development footprint and surrounds (Created using CapeFarmMapper, July 2024).



Figure 11.Map showing the ecological threat status of the proposed development site (Created using CapeFarmMapper, July 2024).

7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the				
	ICMA.				
Not applicable to this project as the site is inland and not near the coastline.					
8.	Explain whether the screening report has changed from the one submitted together with the application form. Th				
	screening report must be attached as Appendix I.				
The screening tool report has not changed from the one submitted together with the application form.					
9	9 Explain how the proposed development will optimise vacant land available within an urban area				

The proposed development aims to expand existing roadways, all of which are situated within an urban area. The expansion will primarily occur within the existing road reserve and where it will encroach on open areas, these have long been earmarked for this expanded roadway use (hence the split zoning to include Transport 2).

10. Explain how the proposed development will optimise the use of existing resources and infrastructure.

The proposed project involves widening and upgrade of the existing Ottery Road, South Road, Waterbury Road, and Main Road, and constructing an overpass bridge between South Road and Waterbury Road. This initiative aims to improve accessibility and provide safe, reliable transportation for nearby communities. Preferring to expand and enhance public transport capacity within the existing infrastructure rather than creating a new system is advantageous for several reasons:

- Established communities in the area would directly benefit from improved transportation services.
- Upgrading the existing roadways would enhance their structural integrity and increase their capacity to accommodate traffic.
- Limited available space within local communities makes integrating improvements into the existing infrastructure more practical and sustainable.

Additionally, the project will serve as a vital link for road users connecting to Wynberg and Claremont via the eastern regions of the City. Several interconnected IRT roadways have either been completed or are in progress, making this project the final work package necessary for the entire system to function effectively as intended.

Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).

The proposal itself will not require additional services from the City. Electricity use will be reduced by replacing current street lights with LED lamps. The proposal will not use water or generate sewage. Provision is made for stormwater generated on site to link to existing infrastructure.

The current provision of power by the City suggests adequate capacity to support this requirement. Confirmation of capacity is found in **Appendix E16**.

12. In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.

The need and desirability of the proposed development can be evaluated in terms of the Department's Guideline on Need and Desirability (March 2013) and the DEA's Integrated Environmental Management Guideline on Need and Desirability, which focus on ensuring that developments contribute to sustainable socio-economic benefits, address community needs, and align with environmental, social, and economic goals in a manner that is both environmentally responsible and socially inclusive.

The following is noted:

#### A. URBAN EDGE / EDGE OF BUILT ENVIRONMENT FOR THE AREA.

The entire site falls well within a developed area and within the urban edge.

B. IS THE PROPOSAL ALIGNED WITH THE EXISTING SDF AND ASSOCIATED TIMEFRAMES AND IS THE PROPOSED DEVELOPMENT IN LINE WITH THE PROJECTS AND PROGRAMMES IDENTIFIED AS PRIORITIES WITHIN THE CREDIBLE IDP?

Refer to discussions in points 1 – 11 above.

C. SHOULD DEVELOPMENT, OR IF APPLICABLE, EXPANSION OF THE TOWN/AREA CONCERNED IN TERMS OF THIS LAND USE (ASSOCIATED WITH THE ACTIVITY BEING APPLIED FOR) OCCUR ON THE PROPOSED SITE AT THIS POINT IN TIME?

The City of Cape Town's transport network is under increasing pressure, particularly in the Cape Flats area, where public transport efficiency is critical for economic participation, social mobility, and urban sustainability. The expansion of road infrastructure, the introduction of dedicated bus lanes, and the enhancement of non-motorised transport (NMT) facilities are urgent interventions required to improve connectivity, reduce congestion, and enhance commuter safety. The project is therefore critical at this point in time.

From a spatial perspective, the site is ideal for the proposed development, as it forms part of an existing transport corridor identified for public transport expansion in the City's Integrated Transport Plan (ITP), Spatial Development Framework (SDF), and Integrated Development Plan (IDP). Therefore, delaying the project could result in increased congestion, longer travel times, and hindered economic activity in key commercial and residential nodes. Furthermore, investment in public transport infrastructure now will ensure that future urban growth and densification in the area are supported by a well-integrated, accessible transport system.

The proposed route's location has been determined by the City of Cape Town's systems planning team. As outlined in the City's Transport Management Strategy and Development Framework (CTMSDF) in **Figure 12**, this route will enhance accessibility for local communities and businesses, providing improved connections to other work centres and development nodes.

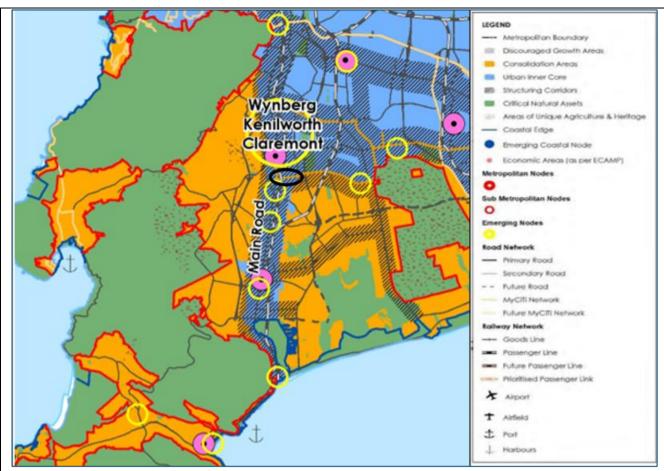


Figure 12: Site Location within the MSDF – circled in black (extracted from City of Cape Town MSDF, 2023)

The widening of South Road, intersection upgrades, and the new railway bridge will provide immediate and long-term mobility benefits, facilitating more efficient public transport operations and improved traffic flow for private vehicles. The project also supports sustainability objectives by reducing vehicle emissions through improved traffic efficiency and prioritizing public and non-motorised transport users.

Several factors support the proposed project on this site, including the lack of biophysical sensitivities, the existing designation of most of the site for transport use, the alignment with municipal and regional planning frameworks, and the fact that it was determined as the most appropriate route for this critical link to those residing in the East to the opportunities in the West (economic, recreational and health).

# D. DOES THE COMMUNITY/AREA NEED THE PROJECT AND THE ASSOCIATED LAND USE CONCERNED (IS IT A SOCIETAL PRIORITY)?

The project is needed by the community and the broader Cape Town metropolitan area. The Cape Flats region, including Wynberg and surrounding areas, has a high reliance on public transport, with many residents depending on buses, minibus taxis, and trains for their daily commute. However, traffic congestion, unreliable public transport services, and safety concerns currently pose significant challenges for commuters. The dedicated bus lanes, intersection upgrades, and improved non-motorised transport (NMT) infrastructure will enhance accessibility, efficiency, and commuter safety, making the public transport system more reliable and inclusive.

From a transport and mobility perspective, the project directly addresses the need for an integrated, high-capacity public transport system that reduces travel times, alleviates congestion, and promotes equitable access to economic opportunities. The planned road upgrades will facilitate more efficient bus operations along the MSEC, improving connectivity between residential areas and key commercial hubs. This will particularly benefit lower-income commuters, who rely heavily on affordable, safe, and efficient transport options to access work, education, healthcare, and other essential services.

The project also supports sustainable urban development by aligning with the City's Integrated Development Plan and Spatial Development Framework. These forward planning instruments are founded on the needs of the communities of the Metro.

Beyond transport benefits, the project has social and economic implications. By improving mobility and connectivity within the Wynberg-Plumstead area as well as forming part of the greater MSEC, it can stimulate local economic activity, create job opportunities during construction and operation, and contribute to social upliftment in the affected communities. Furthermore, the proposed road improvements and new bridge over the railway line will help address historical spatial inequalities between the east and west by enhancing access to economic and social opportunities for commuters and residents of the regional area.

The proposed development also provides the City of Cape Town with an opportunity to re-structure and intensify the regional area and transport route, previously neglected and subject to apartheid era planning. These opportunities are as follows:

Develop vibrant areas by removing barriers to access;

- Improve connectivity throughout the Metropolitan areas;
- Increase efficiency of people's movement and as an aid to the movement of commuters and development activities:
- Improve access and transportation routes to encourage future development and intensification of use;
- Decrease walking distances from residential and places of work to public transport facilities;
- Reinforce convergence on core routes and access points; and
- Reinforce the use of the existing rail stations.
- E. ARE THE NECESSARY SERVICES AVAILABLE TOGETHER WITH ADEQUATE UNALLOCATED MUNICIPAL CAPACITY (AT THE TIME OF APPLICATION). OR MUST ADDITIONAL CAPACITY BE CREATED TO CATER FOR THE PROJECT?

No additional services are required to support the proposed development in terms of the operation of the road.

F. IS THIS PROJECT PROVIDED FOR IN THE INFRASTRUCTURE PLANNING OF THE MUNICIPALITY AND IF NOT, WHAT WILL THE IMPLICATION BE ON THE INFRASTRUCTURE PLANNING OF THE MUNICIPALITY (PRIORITY AND PLACEMENT OF SERVICES AND OPPORTUNITY COSTS)?

The proposed development is provided for in the infrastructure planning of the City of Cape Town (CCT) municipality. The proposed development is situated along a key connector route, which is designated as part of the future MyCiTi Network in the City of Cape Town's Transport Management Strategy and Development Framework (CTMSDF) (2018). The project is aligned with the City's Integrated Transport Plan, Spatial Development Framework, and Integrated Development Plan, which identify the expansion and improvement of public transport infrastructure as key priorities. The development is incorporated into the long-term infrastructure planning to support sustainable urban growth, mobility, and connectivity in the eastern region of Cape Town, and is part of the broader MSEC strategy to enhance public transport services.

#### G. IS THIS PROJECT PART OF A NATIONAL PROGRAMME TO ADDRESS AN ISSUE OF NATIONAL CONCERN OR IMPORTANCE?

One of the key objectives of the National Development Plan (NDP) under infrastructure improvement is the development of a public transport system designed to better connect rural and urban nodes. This initiative aims to provide individuals with improved, faster, and safer access to their workplaces and educational institutions.

H. DO LOCATION FACTORS FAVOUR THIS LAND USE (ASSOCIATED WITH THE DEVELOPMENT PROPOSAL AND ASSOCIATED LISTED ACTIVITY(IES) APPLIED FOR) AT THIS PLACE? (THIS RELATES TO THE CONTEXTUALISATION OF THE PROPOSED LAND USE ON THE PROPOSED SITE WITHIN ITS BROADER CONTEXT.)

Refer to the discussion on the suitability of the site as detailed elsewhere in this section.

I. WILL THE DEVELOPMENT PROPOSAL OR THE LAND USE ASSOCIATED WITH THE DEVELOPMENT PROPOSAL APPLIED FOR, IMPACT ON SENSITIVE NATURAL AND CULTURAL AREAS (BUILT AND RURAL/NATURAL ENVIRONMENT)?

Given that the proposed route is located within an urban setting, its impact on the natural environment will be negligible. A freshwater and botanical compliance assessment has confirmed that the route is ecologically transformed, with no areas of natural sensitivity requiring consideration.

The heritage practitioner has reported that the road upgrades will have an impact on the socio-cultural environment for the surrounding communities. This is as a result of road closures and the magnitude of the infrastructure being introduced. This is detailed in full in the baseline and impact assessment sections of this BAR.

J. WILL THE PROPOSED DEVELOPMENT OR THE LAND USE ASSOCIATED WITH THE PROPOSED DEVELOPMENT APPLIED FOR, RESULT IN UNACCEPTABLE OPPORTUNITY COSTS?

There is no opportunity cost associated with the road reserve areas, as these areas are designated exclusively for transport infrastructure, and no other forms of development would be permitted within them.

There is an opportunity cost for landowners and land users whose properties will be encroached upon by the proposed development where it extends beyond the designated road reserve. The City of Cape Town must follow legal and regulatory requirements for the acquisition of private properties. This will include format engagement with the affected landowners. Similarly, the required protocols and legal requirements will be followed in relation to eviction of tenants on affected City owned properties.

K. WHAT WILL THE CUMULATIVE IMPACTS (POSITIVE AND NEGATIVE) OF THE PROPOSED LAND USE ASSOCIATED WITH THE DEVELOPMENT PROPOSAL AND ASSOCIATED LISTED ACTIVITY(IES) APPLIED FOR, BE?

The cumulative impact of the implementation of this project will have a significant positive outcome for the citizens of the greater Metropolitan area. This particular work package will have cumulative negative consequences on certain businesses and residences. This is detailed in the impact assessment.

L. IS THE DEVELOPMENT THE BEST PRACTICABLE ENVIRONMENTAL OPTION FOR THIS LAND/SITE?

The proposed development considers the need for sustainable urban mobility, efficient land use, and minimization of environmental impacts. The majority of the site is already designated as a road, and the proposed upgrades align with existing transport infrastructure, reducing the need for greenfield development and associated environmental disturbances. The project promotes public transport over private vehicle use, which helps reduce carbon emissions, alleviate congestion, and improve air quality. Additionally, the inclusion of non-motorised transport (NMT) infrastructure such as pedestrian walkways and cycling lanes encourages active mobility, further contributing to sustainable urban transport solutions.

The proposed expansion to accommodate the MSEC will provide a much-needed service to the surrounding community. Additionally, the expansion will enhance road safety along this section of South Road and its connecting routes, particularly for pedestrians and other non-motorized transport users.

Despite the reported negative impacts on the immediately surrounding community from a social and visual perspective, the strategic importance of improved public transport, its positive environmental outcomes, and its alignment with existing land use the supports this project as being the best practicable environmental option for this site.

#### M. WHAT WILL THE BENEFITS BE TO SOCIETY IN GENERAL AND TO THE LOCAL COMMUNITIES?

This question has been responded to in detail in the need and desirability section. Improvements will include reduced travel times, increased reliability of transport services, enhanced connectivity across the metro area and better access to economic opportunities and areas of interest.

Overall, the development will contribute to a more inclusive, efficient, and environmentally sustainable transport system, improving the quality of life for both local communities and the broader metropolitan population.

# N. HOW THE GENERAL OBJECTIVES OF INTEGRATED ENVIRONMENTAL MANAGEMENT AS SET OUT IN SECTION 23 OF THE NEMA HAVE BEEN TAKEN INTO ACCOUNT:

The general objectives of environmental management are to:

(a) Promote the integration of the principles of environmental management set out in section 2 into the making of all decisions which may have a significant effect on the environment.

This assessment has been conducted in accordance with the National Environmental Management Act (NEMA) (Act 107 of 1998), as amended, and the Environmental Impact Assessment (EIA) Regulations of April 2017. Additionally, the proposed development aligns with and contributes to the objectives of relevant local development plans, reinforcing its compliance with the applicable planning and regulatory frameworks.

The project has been designed with a holistic approach, considering the needs of both the local communities and the broader City of Cape Town. It is environmentally, and economically sustainable, with a strong emphasis on improving accessibility, thereby promoting equitable urban development within the metropolitan area.

(b) Identify, predict, and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimizing negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2.

This has been undertaken and is detailed in the impact assessment section of this report.

(c) Ensure that the effects of activities on the environment receive adequate consideration before actions are taken in connection with them.

This has been undertaken and is detailed in the impact assessment section of this report.

(d) Ensure adequate and appropriate opportunity for public participation in decisions that may have a significant effect on the environment.

Meaningful public engagement will be undertaken as part of this Basic Assessment process in line with legislated requirements. Refer to **Appendix F** for the detailed methodology.

(e) Ensure the consideration of environmental attributes in management and decision-making which may have a significant effect on the environment.

All comments received from Interested and Affected Parties will be carefully considered, responded to and will be incorporated into the final Basic Assessment Report. This will inform the decision-making.

(f) <u>Identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued</u> in accordance with the principles of environmental management set out in section 2.

The proposed development and its associated activities have been investigated and assessed in relation to with the sensitivities identified in the baseline environment. Subsequently, the alignment of current and future development and management plans for the area (e.g., the existing road infrastructure) were considered. The assessment also considers the direct, indirect and cumulative impact on local communities as well as the greater Metropolitan area.

Mitigation measures have been proposed to minimize any adverse impacts, while measures to enhance the potential positive effects of the development have also been identified. Ultimately, the proposed development is driven by the pressing social need for improved connectivity and accessibility, ensuring greater inclusivity and integration within the community.

Furthermore, the report informs authorities of uncertainties and assumptions to ensure that a cautious approach is adopted in decision-making.

In summary, the modes of environmental management employed in the assessment of the impacts of the proposed development are considered to be adequate.

# O. DESCRIBE HOW THE PRINCIPLES OF ENVIRONMENTAL MANAGEMENT AS SET OUT IN SECTION 2 OF THE NEMA HAVE BEEN TAKEN INTO ACCOUNT:

The principles of environmental management, as outlined in Section 2 of the National Environmental Management Act, have been duly considered in this process. The principles most relevant to the proposed development include the following:

- The development prioritizes people and their needs, ensuring that their physical, psychological, cultural, and social interests are addressed equitably, where applicable. A key focus is on improving sustainable public transport and enhancing accessibility for previously disadvantaged communities, as well as promoting general accessibility across the City of Cape Town.
- The proposed development is expected to be socially, environmentally, and economically sustainable, contingent upon the implementation of the recommended mitigation measures.

The proposed development has applied sustainable development to the following factors:

- **Disturbance of ecosystems and loss of biodiversity:** The proposed development ensures that ecosystems are not disturbed, and biological diversity is not compromised. There are no sensitive areas along the route that will be encroached upon or significantly impacted.
- Pollution and environmental degradation: The development prioritizes the avoidance of pollution and environmental
  degradation. Where complete avoidance is not possible, pollution will be minimized and remedied through the
  reduction of private transport, thus decreasing emissions and traffic congestion.
- **Waste management:** Waste generation will be avoided wherever possible. In cases where waste is produced, it will be minimized, reused, or recycled. Construction phase waste will be managed according to the guidelines set out in the Environmental Management Programme, and the operational phase is not expected to generate significant waste.
- **Non-renewable resource use:** The development will promote responsible and equitable use of non-renewable resources by providing a sustainable public transport service to previously disadvantaged communities. Additionally, the proposal aims to reduce private vehicle use and decrease reliance on fossil fuels.
- **Risk-averse approach:** A cautious and risk-averse approach will be applied, considering the limits of current knowledge regarding potential consequences. The design of the development will account for climate change and future urban development in the area to ensure long-term sustainability.
- Minimizing negative impacts: Anticipating and preventing negative impacts on both the environment and people's
  environmental rights is a priority. Where impacts cannot be avoided, efforts will be made to minimize and remedy
  effects.

#### CONCLUSION

The need and desirability of this project is evidenced in the extensive discussion in this section.

# SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

An initial Public Participation Process strategy was outlined in the Notice of Intent submitted to the DEA&DP.

The pre-application Public Participation Process (PPP) activities include the following (noting that no alternative sites have been considered in the impact assessment process, as the relevant section of road is a major route linking key neighbourhoods and is deemed appropriate for the proposed development):

- An extensive public participation process was held in 2015 for the Conceptual Design of the IRT Phase 2A, then referred to as the Lansdowne Wetton Corridor (LWC) along trunk routes T11 and T12, with the exclusion of the Wynberg end, which was at the time the subject matter of a High Court application. The PPP held in 2015 initially engaged with Sub-councils, Ward Committees, Ward Councillors, Ward Development Forums, potentially affected Taxi Leadership and Civic based organisations, whereby members were briefed with respect to the scope of the project and advised of forthcoming open days. Following this, 33 open days were held during May/June/July 2015 in compliance with Section 17 of the Local Government: Municipal Systems Act No. 32 of 2000. This PPP allowed the public, other spheres of government, organized service providers and other interested parties the opportunity to submit comments, recommendations and inputs to the City for consideration. Notices were placed in local newspapers advising the public of open days where the draft Conceptual Design was made available. Official were in attendance to elaborate on the project, provide points of clarity on the Conceptual Design and answer questions. Please refer to **Appendix P**.
- Compilation of a preliminary Interested and Affected Party (I&AP) database, informed by research on relevant
  officials and stakeholder groups who may have an interest in the area or the project.

The post-application Public Participation Process (PPP) undertaken for the current public review period of this post-application Draft BAR includes the following activities:

- A 30-day public comment period for the Draft BAR.
- Notification of the availability of the Draft BAR was emailed to the preliminary Interested and Affected Party (I&AP) database.
- A knock-and-drop exercise, along with the notification letter, was conducted for residences and formal institutions adjacent to the proposed development.
- The Draft BAR has been made available for download on Chand's website throughout the comment period.
- An executive summary for separate download (for I&APs with limited access to data) is also available on Chand's website during the comment period.
- Site notices have been placed at the start, middle, and end of the route on South Road and Waterbury Road. These notices, in English, contain the information prescribed by the EIA Regulations, 2014, as amended, and PPP guidelines.
- Advertisements have been placed in two local newspapers distributed to all affected areas along the route containing the information as prescribed by the EIA Regulations, 2014, as amended, and PPP guidelines.
- A hardcopy of the Executive Summary has been made available at the Wynberg Library and the local Subcouncil offices, along with a comment box and comment forms, for the duration of the public commenting period.
- A hardcopy of the Executive Summary has been made available at the Wynberg Library and Subcouncil offices, along with a comment box and comment forms, for the duration of the public commenting period.
- Hard copies of the BAR will be made available to I&APs or commenting parties, upon reasonable request.

To provide access to commenting for individuals without access to data, email, or fax, Chand has encouraged I&APs to make telephonic contact and submit their comments, which will be recorded (in writing) as part of the Basic Assessment process.

All registrations and comments received during the 30-day public comment period will be added to the I&AP database in **Appendix F** and included in the final BAR for submission to the DEA&DP.

Evidence for the activities listed above will be included in the Comments & Responses Report (**Appendix F**) of the final BAR, which will be submitted to the DEA&DP for decision-making.

Once the DEA&DP has reviewed the final BAR and issued its decision, the decision, along with the date, reasons for decision, means of accessing the decision, an explanation of the appeals process, and any further requirements, will be distributed to the registered I&APs via email for those with email addresses and by post for those without. The decision will also be uploaded to Chand's website for download. The applicable appeal period will be explained in accordance with the decision.

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F

All Public Participation Process (PPP) activities, as outlined in the application form, have been and will be carried out. For further details on the PPP process, refer to **Appendix F** and the sections above. **Appendix F** will be updated following the public review of the Draft BAR.

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

All State Departments and Organs of State indicated, as outlined in the application form, have been issued a notification on the availability of the Draft BAR for comment. It is hoped that they will provide comment on this report within the statutory period. If not, as per Regulation 3 (4) of the EIA Regulations, 2014 (as amended), it will be assumed that they have no comment.

These departments include the following:

- DEA&DP: Pollution Management, Sub-Directorate: Pollution and Chemicals Management
- Department of Environmental Affairs and Development Planning: Development Planning
- Department of Environmental Affairs & Development Planning: Pollution Management
- Department of Environmental Affairs & Development Planning: Air Quality
- Department of Environmental Affairs & Development Planning: Waste Management
- Department of Environmental Affairs and Development Planning: Biodiversity
- Local authority (i.e., City of Cape Town line departments/ note that they are also the "District Municipality" in this regard because they are a Metropol)
- Department of Water & Sanitation
- Heritage Western Cape
- Department of Transport and Public Works WCG
- Western Cape Government: DHS
- Western Cape Government: DoH
- South African National Biodiversity Institute (SANBI)
- Cape Nature
- Department of Forestry, Fisheries AND Environment (DFFE): Biodiversity and Conservation
- Department of Economic Development and Tourism
- 4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

The following State Departments and Organs of State have not been consulted or notified about the availability of the Draft Basic Assessment Report, as their departments and jurisdictions are not considered relevant to the scope of the proposed development:

- The Department of Forestry, Fisheries and the Environment: Oceans and Coast; and
- The Department of Environmental Affairs and Development Planning: Coastal Management.
- Western Cape Department of Agriculture
- SANParks
- 5. if any of the State Departments and Organs of State did not respond, indicate which.

A full list will be included within the Final Basic Assessment Report submitted to the competent authority for decision-making.

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

Upon receipt and review of the Notice of Intent, the Department of Environmental Affairs and Development Planning (DEA&DP) provided the following feedback:

- Confirmation of the proposed scope of works;
- Confirmation that Listed Activities 4 and 18 of Listing Notice 3 of the EIA Regulations, 2014 (as amended) are applicable to the proposed development;
- Confirmation that the proposed development proposal triggers Section 38(1) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA").
- Heritage Western Cape confirmed that a Heritage Impact Assessment (HIA) is required, with proof of submission
  to Heritage Western Cape (HWC) appended to the draft Basic Assessment Reports (BAR), and the Record of
  Decision (RoD) included in the final report for decision-making. Note, the HIA is included as Appendix G(5) which
  has been circulated to Heritage Western Cape for review and comment.
- The National Department of Water and Sanitation (DWS) must be included as a key authority in the Public Participation Process. If DWS confirms that a Water Use License Application (WULA) or other requirements, such as General Authorisation, are necessary, compliance with these must be ensured. Note, the
- In respect of protocols, the proposed Terrestrial Biodiversity Compliance Statement must align with the Terrestrial Biodiversity Theme Protocol. The Heritage Impact Assessment (HIA) and Socio-Economic Impact Assessment must comply with the requirements outlined in Appendix 6 of the EIA Regulations, 2014 (as amended).

- Confirmation that a Basic Assessment Process must be followed;
- The BAR must contain all information requirements outlined in Appendix 1 of the EIA Regulations, 2014 (as amended) for the requirements with respect to the 'Content of basic assessment reports.
- The Public Participation Process (PPP) must comply with the requirements of Regulation 41 of the EIA Regulations, 2014 (as amended).
- The process for submission of EIA applications:
- Where electronic copies cannot be accessed by I&APs, alternative access to copies of the pre-applicationand draft BARs are made available:
- State Departments/Organs of State to be consulted during the formal EIA application process;
- Content requirements pertaining to the EMPr;
- The need for and desirability of the proposed activity must be considered and reported on:
- The BAR must reflect how the strategic context of the site in relation to the broader surrounding area, has been considered in addressing need and desirability
- The requirement for the investigation and inclusion of Alternatives;
- To show how the proposed project complies with the principles contained in Section 2 of the NEMA and must show how the proposed project meets the requirements of sustainable development;
- The social context of the proposed development must be taken into account; and
- The potential impacts on climate change must be assessed and reported.

As this report represents the Draft Basic Assessment Report currently undergoing public review and comment, no issues or further feedback have been raised thus far.

A summary of all issues raised during the Public Participation Period will be included in the Final Basic Assessment Report, as well as in the Comments and Responses Report submitted to the competent authority for decision-making.

#### Note:

A register of all the I&AP's notified, including the Organs of State, <u>and</u> all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that "Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
  - o if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
  - o if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
  - o if a facsimile was sent, a copy of the facsimile Report;
  - o if an electronic mail was sent, a copy of the electronic mail sent; and
  - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice
    was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

# SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

#### 1. GEOLOGY

A geotechnical investigation was undertaken by HHO Consulting Engineers. Please refer to **Appendix G8** for the geotechnical investigation.

The near-surface geology of the site according to the 1:50 000 scale geological map is dominated by Quaternary age (recent) "Light-grey to pale red sandy soil". Weathered granite of the Cape Granite Suite is indicated to occur at surface some 700m to the north of the site. According to the Geological Survey (1984) there are no major intrusions, faults or other geological structures present at the site or surrounds.

The site is covered by the Engineering Geological Map 3418 AB & AD Cape Peninsula and is found to have a medium suburban development potential class with the need for the design to take account of consolidation, wind erosion, medium to high permeability of loose sands and/or moderately aggressive soil (HHO Consulting Engineers, 2024). The resulting cost implications to development within this class is low (Council for Geoscience, 2008). Error! Reference source not found. 3 is an extract of engineering geological map 3418 AB & AD Cape Peninsula showing the suburban development potential class.

Borehole drilling tests have confirmed that the typical soil profile consists of a topsoil capping underlain by colluvium and transported soils, which are further underlain by residual granite (HHO Consulting Engineers, 2024). Topsoil varied from 0,5m to 1,2m thickness and was typically described as slightly moist, light brown to dark brown to dark grey, loose to medium dense, silty sand (HHO Consulting Engineers, 2024).

The transported soils/colluvium comprise materials that have been transported and deposited into position by water and/or wind. The transported soils in this region were typically described as *slightly moist* to very moist, brown, yellow brown, grey and beige, medium dense, silty sand extending to depths of between 3,0m and 12,5m below existing ground levels.

Beneath much of the site, the transported soils are generally found to extend to around 3,0m to 6,0m depth. However, beneath the western end of the site, from just west of the railway line, the thickness of the transported sands appears to rapidly increase, plunging to between 9,3m and 12,5m depth over a very short distance (HHO Consulting Engineers, 2024).

Residual soils derived from in-situ weathering Cape Granite Suite were encountered immediately beneath the transported soils at depths ranging from 3,0m to 12,5m. These residual granite soils are described as orange yellow or dusky orange to white to pale brown/grey often blotched or streaked pale red, stiff to very stiff or medium dense, sandy silty clay to clayey sandy silt generally with minor quartz gravels (HHO Consulting Engineers, 2024).

#### 2. Groundwater

	1.1.	Was a specialist study conducted?	YES	NO		
1.2. Provide the name and or company who conducted the specialist study.						
	Not applicable given the development activities proposed, and the information contained in the geotechnical investigation (Appendix G8).					
	lndicate above which aquifer your proposed development will be located and explain how this has influenced					

1.3. Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.

The proposed site is located on top of the Cape Peninsula and Cape Flats Strategic Water Source Area (SWSA) for groundwater resources. The underlying aquifer is classified by the Department of Water and Sanitation (DWS) and indicated in Cape Farm Mapper as a Major Intergranular Aquifer (to the east of the railway line) and a Fractured and Intergranular Aquifer (to the west of the railway line). The aquifer is anticipated to have an approximate yield of 0.1 - 0.5 I/s on the east and 0.0 - 0.1 I/s on the west. The aquifer is noted to be most vulnerable and have a very high susceptibility to changes in groundwater quality and levels (Cape Farm Mapper, accessed 20 July 2024). Please refer to **Figure 13** below.

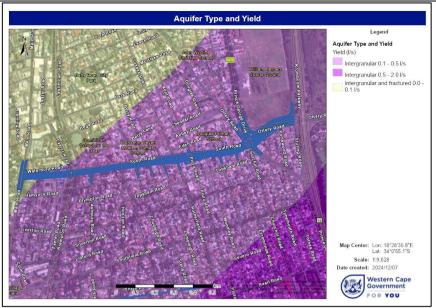


Figure 13. Aquifer Type and Yield (Cape Farm Mapper, July 2024)

1.4. Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.

According to the geotechnical investigations conducted (**Appendix G8**), a perched groundwater table is present in the region and is expected to vary seasonally between depths of 1.5 meters and 3.0 meters.

The groundwater table is a perched aquifer resulting from infiltration and lateral migration of surface or near-surface water within the permeable sandy, transported soils and which cannot enter or drain further through the impermeable (or extremely low permeability) residual granite clay soils that underlie them (HHO Consulting Engineers, 2024).

The investigation noted that on both sides of the existing railway line, the subsurface sand between approximately 1.5 meters and 2.5 meters will be saturated due to the perched groundwater table. Consequently, any excavations exceeding 1.5 meters in depth will experience continuous ingress of perched groundwater, resulting in the slumping of saturated sands and undermining any battered sidewalls above (HHO Consulting Engineers, 2023). Extensive dewatering would therefore be required in excavations, with estimates in excess of 250 liters per linear meter of wall on the western side of the railway line (HHO Conceptual Design Review Report, May 2023).

Therefore, should an underpass (alternative 1) be implemented on site, groundwater lowering of temporary lateral support, including control and drainage via continuous dewatering activities will be required. This will alter the existing local perched groundwater status quo, which could result in subsidence of surrounding infrastructure and buildings due to the changed groundwater condition (HHO Consulting Engineers, 2024). Furthermore, it could impact the availability of groundwater in the area as a resource for private consumption or irrigation.

To address groundwater and site drainage for the preferred alternative, mitigation measures have been included in the EMPr to manage construction-phase drainage and prevent flooding into neighbouring properties (refer to **Appendix H**).

# 3. Surface water

2.1.	Was a specialist study conducted?	YES	<del>NO</del>			
2.2.	Provide the name and/or company who conducted the specialist study.					
	An aquatic biodiversity compliance statement was compiled by Mr. Craig Burne of NCC Environmental <b>Services (Appendix G7)</b> . Reference to this statement is hereafter referred to as (NCC, 2023b).					
2.3.	2.3. Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.					

The screening of the site using the National Web-based Environmental Screening Tool indicates a Very High aquatic biodiversity theme (refer to **Figure 14**). As such, a site sensitivity inspection was undertaken in August 2023 by NCC Environmental Services to verify this indicator. Please refer to **Appendix G7** for the full compliance statement.

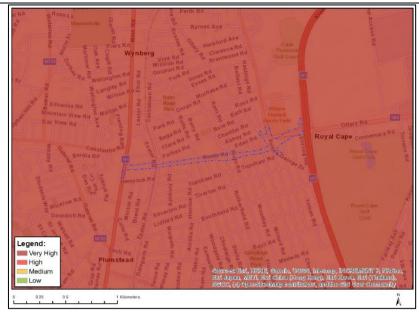


Figure 14: Extract of the Aquatic Biodiversity Theme from the Screen Tool Report (July 2024)

The site is located within the Table Mountain SWSA for surface water. On a regional scale, the proposed development is located within the Berg-Olifants Water Management Area (WMA) in quaternary catchment G22D. No natural surface water resources are situated directly within or traverse the site footprint (NCC, 2023b). There are no fish support areas, fish sanctuaries, fish translocation areas, fish migration corridors, fish rehabilitation areas, wetland clusters, high water yield areas, or free-flowing rivers within the site (NCC, 2023b).

In terms of surrounding aquatic features, the Diep River is located >900m to the west of and south-west from the western extremity of the site boundary. Additionally, several artificial and natural NFEPA and NWM5 wetlands are situated in the greater area around the site, however none are within the NEMA-regulated area for wetlands/watercourses (NCC, 2023b). One NFEPA wetland located on the Royal Cape Golf Club is noted to occur marginally within 500m from the site boundary (NCC, 2023b). As per NCC (2023b), the distance from the site to this wetland, precludes any significantly impact on the watercourse.



Figure 15. Map showing no watercourses, NFEPA or NWM5 wetlands are situated within or traverse the site footprint (NCC, 2023b)

The site has been transformed, is highly modified with limited ecological connectivity of surface water resources to other surface water resources (NCC, 2023b).

Therefore, NCC (2023b) has determined that the sensitivity of aquatic biodiversity at the site is Low.

# 4. Coastal Environment

3.1. Was a specialist study conducted? YES NO
---

3.2. Provide the name and/or company who conducted the specialist study.
Not applicable. The proposed development is not located along the coastline or in close proximity to the sea/ocean. As such, a specialist study was not deemed relevant.
3.3. Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.
Not applicable.
3.4. Explain how estuary management plans (if applicable) has influenced the proposed development.
Not applicable.
3.5. Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.
Not applicable.

# 5. Biodiversity

4.1. Were specialist studies conducted?						
4.2.	4.2. Provide the name and/or company who conducted the specialist studies.					
A terrestrial biodiversity compliance statement was compiled by Mr. Sean Altern of NCC Environmental Services (Appendix						
<b>G6).</b> Reference to this statement is hereafter referred to as (NCC, 2023a).						

4.3. Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.

The screening of the site using the National Web-based Environmental Screening Tool indicates a Very High terrestrial biodiversity theme (refer to **Figure 16**). A such, a site sensitivity inspection was undertaken in August 2023 by NCC Environmental Services to verify this indicator. Please refer to **Appendix G6** for the full compliance statement.

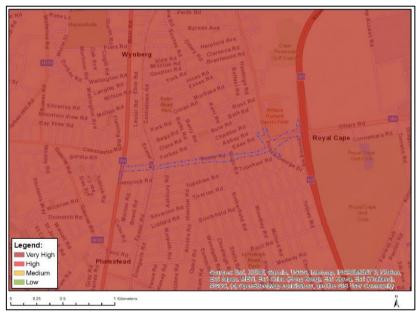


Figure 16: Extract of the Terrestrial Biodiversity Theme from the Screening Tool Report (July 2024)

Upon reviewing aerial satellite imagery, it is observed that the site and its surrounding urbanization have remained unchanged since 2002. The area has shown little vegetation or natural features since that time, indicating a long period of unsuitability for natural fauna and flora. Therefore, NCC (2023a) concludes that there is minimal likelihood of terrestrial biodiversity persisting in the area.

The proposed site is not located within any Critical Biodiversity Areas (CBA), Ecological Support Areas (ESA) or other areas warranting conservation in terms of Biodiversity objectives (**Figure 17**). Furthermore, the site is not located within any Protected Areas as defined by NEMA, Cape Nature or SANBI.



Figure 17. Conservation Map (Cape Farm Mapper, July 2024)

The proposed site is situated within an area historically occupied by Cape Flats Sand Fynbos, a critically endangered vegetation type, however the ground truth exercise conducted by NCC (2023a) confirmed that the sections of the site containing greenery and earmarked for development have essentially been transformed and comprise no indigenous plant communities (NCC, 2023a).

Due to the highly transformed nature of the site and the negative present ecological drivers responsible for this state (fragmentation, trampling, ruderal weed proliferation, municipal service management) as well as the lack of positive vegetation drivers, there is a strong inference that no plant species of conservation concern are present, or able to survive under such conditions (NCC, 2023a).



Figure 18. Vegetation Map (Cape Farm Mapper, July 2024)

The regeneration of native vegetation has been suppressed by the complete cover of grass species (Ficus rubiginosa, Kiggelaria africana, Syagrus romanzoffiana, Melia azedarach and Searsia penduline). These changes are attributed to several anthropogenic influences, including mowing, soil disturbance, trampling, fragmentation, edge effects, and the suppression of natural vegetation drivers such as fire and associated pollinator animals (NCC, 2023a). Additionally, intentional landscaping efforts have led to the planting of both indigenous and exotic species on the site.

Due to the state and quality of the habitat (food, shelter, threats and opportunities for succession and survival), no faunal species of conservation concern were deemed present, or able to survive in the highly degraded transformed habitat ((NCC, 2023a). Consequently, the assessed area lacks suitable habitat for indigenous flora or fauna of Conservation Concern, and no such species were found during the assessment (NCC, 2023a). The habitat has been irreversibly transformed, influenced negatively by factors such as trampling, fragmentation, and the presence of exotic species. Additionally, essential ecological drivers like fire, forage, shelter, and wildlife corridors are absent or inadequately provided. Therefore, the site is classified as having 'Low' sensitivity for terrestrial biodiversity.

Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.

The proposed site does not fall within CBA, ESA, or other designated conservation areas according to biodiversity objectives. It also does not overlap with Protected Areas defined by NEMA, Cape Nature, or SANBI. Historically, the site was occupied by Cape Flats Sand Fynbos, a critically endangered vegetation type unique to Cape Town. However, a ground truth exercise confirmed significant disturbance and lacking indigenous plant communities (NCC, 2023a). Please refer to **Figure 9Figure** 10 and **Appendix D**.

Conclusively, the site is deemed to have 'Low' sensitivity for terrestrial biodiversity.

The WCBSP has thus not had a direct impact on the proposal in terms of the preferred road geometry but has corroborated the findings of the ecological specialists.

4.5. Explain what impact the proposed development will have on the site specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.

The proposed site is located within an area that was historically occupied by Cape Flats Sand Fynbos, a critically endangered vegetation type that is unique to the City of Cape Town. However, a recent ground truthing exercise by NCC (2023a) confirmed that the sections of the site earmarked for development have been severely degraded and are in an advanced state of transition from native to non-native vegetation cover. The site has been significantly transformed due to anthropogenic influences, such as fragmentation, trampling, weed proliferation, and municipal service management, which have suppressed natural vegetation regeneration. As a result, no indigenous plant communities are present, and no species of conservation concern are likely to survive under these altered conditions. The vegetation has been further impacted by the cover of grass species and the suppression of natural drivers like fire and pollinators.

Given the poor state of the habitat, including a lack of essential ecological drivers such as forage, shelter, and wildlife corridors, the site has been classified as having **Low** sensitivity for terrestrial biodiversity. No species of conservation concern were found during the assessment, and no specific mitigation measures are required to address terrestrial biodiversity loss. However, general aquatic biodiversity mitigation measures are included in the Environmental Management Programme (EMPr). Overall, the site's current condition, with irreversibly transformed habitats, reflects the minimal impact on terrestrial biodiversity and highlights the low ecological sensitivity of the area in relation to the proposed development.

The Low terrestrial biodiversity value ascribed to the site by NCC (2023a) is in alignment with the WCBSP as discussed in the preceding section and confirms the acceptability of the preferred road geometry which will not impact on any terrestrial biodiversity of conservation importance.

4.6. If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.

Not applicable. The proposed development is not located within a protected area.

4.7. Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.

The presence and potential impact of fauna on and adjacent to the proposed development have been carefully considered in the planning process. NCC (2023a) notes that the site's historical and current conditions, including anthropogenic influences and habitat degradation, have significantly reduced habitat suitability for fauna species. As a result, there were no constraints to the development or design from a faunal perspective.

Regardless, standard mitigation measures are integrated into the EMPr (Appendix H) to address potential impacts on any remaining local fauna. These measures include strategies to minimize disturbance during construction and manage stormwater and drainage to avoid adverse effects on nearby habitats.

Furthermore, the design of the development incorporates landscaping considerations that support biodiversity enhancement where feasible, although the site's transformed nature limits opportunities for significant ecological connectivity.

By addressing these factors proactively, the proposed development aims to mitigate potential impacts on fauna and contribute positively to local biodiversity conservation efforts within its operational context.

# 6. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.

There were no significant geographical aspects to take into account. The selection of the proposed route's location has been guided by the systems planning team of the City of Cape Town, specifically identified as conducive for supporting the east west movement across the metropole through the implementation of the Integrated Rapid Transit (IRT) network, as detailed in the Cape Town Metropolitan Spatial Development Framework (CTMSDF). This strategic choice aims to enhance accessibility for local communities and businesses to various employment centres and development nodes.

# 7. Heritage Resources

6.1.	Was a specialist study conducted?	YES	OH	
6.2.	2. Provide the name and/or company who conducted the specialist study.			
A Heritage Impact Assessment was conducted by Bridget O'Donoghue (Appendix G5). Reference to this statement is				

A Heritage Impact Assessment was conducted by Bridget O'Donoghue (**Appendix G5**). Reference to this statement is hereafter referred to as (O'Donoghue, 2024).

The Notification for Intent to Develop (NID) was submitted to the provincial heritage authority, Heritage Western Cape (HWC) by Bridget O'Donoghue. The HWC NID response was the requirement for a HIA that included an Archaeological Impact Assessment (AIA), Visual Impact Assessment (VIA), Built Environment Assessment, Cultural Landscape Assessment and a Social Impact Assessment (SIA).

6.3. Explain how areas that contain sensitive heritage resources have influenced the proposed development.

The National Heritage Resources Act no 25 of 1999 (NHRA) Section 38 (1) applies to the application as the site is larger than 5000 square meters and the proposed development could change the character of the site.

#### ARCHAEOLOGICAL SCREENING

Asha Consulting Pty Ltd was appointed to conduct an archaeological screening assessment for the Heritage Impact Assessment (HIA). Their comment on the proposed development is noted below.

Given that the project is located within an urban area, it is expected that any older archaeological materials have likely been disturbed or destroyed during the construction of the existing roads and buildings. Therefore, any isolated finds that may remain are expected to be out of context and of no cultural significance.

It is noteworthy that some houses within the project area are over 100 years old, meaning any materials related to their original construction or early occupation would be considered archaeological. For example, buried foundations of previously demolished buildings, such as those on erven 70084 and 70085 (**Figure 19**) on Waterbury Road and Erf 71799 on South Road, would also qualify as archaeological remains (Asha Consulting as referenced in O'Donoghue (2024)).



Figure 19. Aerial view of Waterbury Road in 1945 showing erven 70084 and 70085 (red boxes) (source: O'Donogue, 2024).

Although the chances of significant archaeological heritage being found are very low, they are not zero. Recommendations from the Archaeological Screening are indicated in **Section 12** below.

#### HERITAGE IMPACT ASSESSMENT

#### Socio-Historical Development

A detailed account of the socio-historical development of the area was considered by the specialist and is contained in the report. Of relevance to this application, are:

- The role of the railway line in the current socio-economic dynamic in Wynberg. The railway line stimulated development in Wynberg, but also created a socio-economic divide:
  - Upper Wynberg (west of the railway) became more affluent.
  - Lower Wynberg (east of the railway) became less affluent.

# Apartheid-Era Spatial Planning

By 1947, Wynberg had a mixed population:

- The area west of Main Road was predominantly White.
- The area east of Main Road (especially east of the railway line) was home to a mix of Coloured, Malay, and White communities.
- The Malay community in Wynberg traced its origins to Rachel van de Kaap, who inherited Kleine Oude Wynberg in 1816.

During apartheid, the government implemented racial segregation policies:

- Plumstead was proclaimed a White area (1966–1984).
- Wynberg east of the railway line was declared a Coloured area (1961).
- Wynberg west of Main Road was designated a White area (1964).

By 1962, the W8 route (except for the William Herbert Sports Facility) was entirely within a developed urban area. The M5 (Kromboom Parkway) was opened in 1982, creating a hard barrier between southern Wynberg and Ottery.

The route has been divided into four sections. Each section is described below.

# Section 1: Waterbury Road

The route section between Main Rd and the railway line passes through a residential area containing the oldest surviving structures in the vicinity. Most erven, except for Erf 74247 (Southfield), were part of the 1880 consolidated Forest Cottage estate. The relevant lots (6-19) were first transferred between 1902 and 1921, with structures dating to this period. The Hague apartment block (Erf 67610) was built between 1953 and 1960 on the site of Sunnyside Cottage.

Waterbury Road is a short, two-lane suburban street between the railway line and Main Rd. It is characterized by low to low-medium scale residential buildings, with apartment buildings primarily on the northern side and single detached homes and three undeveloped erven on the southern side. There are minimal trees along the road, with notable vegetation at the Main Rd intersection, including English Oak and Palm trees. A commercial landmark, a local café, is located on the southeastern corner. The western section has a contained spatial character with buildings closely abutting the road.

Plumstead Main Rd, part of the historic Cape Town–Simonstown route dating back to 1812-1813, holds Grade IIIA heritage significance due to its historical value. Its spatial character includes:

- A wider road section compared to Wynberg Main Rd, featuring four lanes, dual-direction traffic, and sidewalks of varying widths.
- A lack of spatial intimacy due to the road's width.
- A mix of single to medium-scale buildings.
- A curving alignment at the Constantia Rd intersection, creating a gateway experience at the termination of Wynberg Main Rd views.
- Defined gateway points at the northern and southern edges of Wynberg Main Rd leading into Plumstead and Kenilworth Main Rd.
- Few intersections, resulting in large urban blocks.
- Mixed commercial and residential land use, though not a highly active shopping area.
- Mature trees within private properties along Main Rd.
- A medium-grained built environment.



Figure 20. Overview of W8 route-adjacent erven (yellow outlines) and W8 route (red) in relation to graded heritage resources, viz. Grade 3B (dark orange), 3C (light orange), some significance evident (light green), and not conservation worthy (grey) (Source: O'Donoghue, 2024).

#### Section 2: Railway Line & Rotherfield Road

The route section between the railway line and Rotherfield Rd passes through a residential area that was originally part of Southfield Estate. The portion between the railway line and Honiton Rd was subdivided into smaller properties between 1903 and 1938, while the section between Honiton Rd and Rotherfield Rd became part of Southfield Township, laid out in 1928. By 1926, most erven remained undeveloped, with only the erven at the top of Ashbury Rd developed by 1935. Further development between Honiton Rd and Rotherfield Rd occurred between the 1935 and 1945 aerial surveys, though some properties were never developed. Several structures along South Rd were demolished after 1986. The oldest surviving buildings in this section date to after 1926.

South Road is described as follows:

- A two-lane, dual-direction road with no road reserve or non-motorized transport (NMT) facilities.
- Primarily functions as a connector road linking Ottery, Rosmead, and the M5 to Main Rd, Wynberg, and beyond.
- Narrow in relation to the traffic volume it carries.
- Bordered by low-scale detached and semi-detached buildings:
- In Wynberg East, buildings closely abut the road.
- In Plumstead, buildings are set back with grassed areas between them and the road.

- Wynberg East is characterized by a fine-grain urban layout with pedestrian-friendly streets and spaces.
- Plumstead properties feature high solid walls with gardens surrounding residences.
- The northern Wynberg East edge exhibits varied streetscape elements, including solid walls, palisade fences, and verandahs.



Figure 21. Overview of W8 route-adjacent erven (yellow outlines) and W8 route (red) in relation to graded heritage resources, viz. Grade 3B (dark orange), 3C (light orange), some significance evident (light green), and not conservation worthy (grey) (Source: O'Donoghue, 2024).

#### Section 3: Rotherfield and Ottery Roads

The route section between Rotherfield Rd and Ottery Rd passes through a residential area, with Abdullah's Food Centre located southwest of the South Rd and Ottery Rd intersection. Originally part of Southfield Estate, this area was subdivided into residential erven in 1899. Development began between 1899 and 1926, though by 1926, gaps remained, with two housing terraces along South Rd between Milford Rd and Evremonde Rd. The corner shop was built between 1935 and 1945, and by 1966, the area had reached full development. Since then, demolitions have been the main change. The oldest surviving structures date to after 1926.

This portion is described as follows:

- The southern edge features undeveloped land, resulting in weak spatial containment.
- Wynberg East is defined by a fine-grain urban layout with pedestrian-friendly streets and spaces.
- Plumstead properties are marked by high solid walls, with residences set within gardens.



Figure 22. Overview of W8 route-adjacent erven (yellow outlines) and W8 route (red) in relation to graded heritage resources, viz. Grade 3B (dark orange), 3C (light orange), some significance evident (light green), and not conservation worthy (grey) (Source: O'Donoghue, 2024).

#### Section 4: Rosmead Avenue and Kromboom Parkway

The terminal route portion between Rosmead Ave and Kromboom Parkway runs through a predominantly residential area to the south, with the William Herbert Sports Facility to the north. A second-hand car dealership, Wynberg Used Cars, is located southeast of the Rosmead Ave and Ottery Rd intersection. The erven south of Ottery Rd were laid out in 1903 by the Suburban Estates Development and Building Co, with transfers starting in 1905. The first development, a corner property, appeared between 1926 and 1935, and residential development followed between 1935 and 1945. By 1968, all erven along the route were developed, with the structures on the parking terrain east of the car dealership demolished between 1968 and 1986. To the north of Ottery Rd, the erven were originally granted to Messrs Titus (1837) and Young (1888). A large dwelling existed on the Young property by 1897, but it had been demolished by 1926.

The Ottery Rd section is characterized by the dominance of road infrastructure, with low-scaled buildings set back from the road reserve, minimal tree cover, and a lack of gesthetic value.



Figure 23. Overview of W8 route-adjacent erven (yellow outlines) and W8 route (red) in relation to graded heritage resources, viz. Grade 3B (dark orange), 3C (light orange), some significance evident (light green), and not conservation worthy (grey) (Source: O'Donoghue, 2024).

#### Landscape Character

The subject site, within a broader cultural landscape continuum, is characterized as an anthropic urban residential environment. It sits at the interface of urban street grids, though somewhat disrupted by infrastructure such as railway and roadway intersections. The area also includes some commercial uses, like corner shops and places of business (e.g., attorney offices), alongside community facilities like schools (primary, secondary, creche, specialized) and places of workshop, such as the Corpus Christi Catholic Church, Church Hall, and associated structures.

Currently, the site maintains a quiet residential atmosphere, with narrow streets and single-storey buildings from the early to mid-twentieth century that contribute to a fairly consistent urban fabric.

#### **IDENTIFIED HERITAGE RESOURCES**

The identified heritage resources noted within O'Donoghue (2024) were:

- Wynberg East, an historic settlement of fine grain buildings;
- Certain individual buildings, structures and mature trees within the project site;
- Space between the two suburbs Wynberg Est and Plumstead, designed as a buffer between communities of different racial profile according to the Apartheid's policies and regulations;
- Mature trees, that contribute to the sense of place

The assessment was therefore focussed on the potential negative and positive impact on the townscape, individual buildings, mature trees, sense of place and community.

## **Townscapes**

The southern edge of Wynberg East and the northern edge of Plumstead are defined by South Road. In the western section, the road is lined by residences, creating a more defined and engaging streetscape. In the mid and eastern sections, large vacant sites separate the two suburbs, leading to a negative streetscape condition. Despite this, the road allows for easy movement between the two areas for pedestrians, cyclists, carts, and vehicles.

The spatial connections between Wynberg East and Plumstead are crucial for upgrading the urban space through the redesign of the roadway. The proposed road, which will be 6-8 lanes wide, should have frequent pedestrian and vehicle crossings to improve accessibility. The vacant areas south of South Road are suggested for future development into mixed-use buildings.

The Wynberg East side of the road is more vulnerable to negative impacts due to the following factors:

- Buildings face South Road and are close to it
- Most buildings are over 60 years old
- It features a fine-grain urban environment with narrow roads and dense urban blocks
- There are no trees to provide visual and noise screening to the road
- Pavement width is minimal

In contrast, the Plumstead side is characterized by:

- Large areas of vacant land
- Buildings face roads perpendicular to South Road
- Numerous mature trees
- Terraced houses or homes on larger erven

#### **Buildings, Sites and their Uses**

The buildings located immediately adjacent to the proposed revised road are mainly in Wynberg East and along Westbury Road. In contrast, the buildings along Westbury Road are screened by vegetation on both sides of the proposed road.

#### Streetscapes in Context

Currently, the suburbs of Wynberg East and Plumstead have multiples through roads linking the two suburbs.

#### **NMT**

Currently, there is limited NMT facilities along the route.

#### **Buildings Facades and Structures Along the Route**

Currently, the spatially and visually interactive street facing building façade positively contributes to the aesthetics and safety of the street.

# 8. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.

Refer to Section 7 above which describes the historical and cultural aspects of the site in detail.

# 9. Socio/Economic Aspects

8.1. Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.

A Social Impact Assessment was conducted by Tony Barbour. This study is hereafter referred to as (Barbour, 2024) and is included in **Appendix G1**. Furthermore, a Socio-Economic Assessment was conducted by Urban-Econ (referenced as Urban-Econ, 2024 and included in **Appendix G3**).

The proposed route is situated near three residential areas: Wynberg, Plumstead, and Youngsfield (refer to Figure 24).

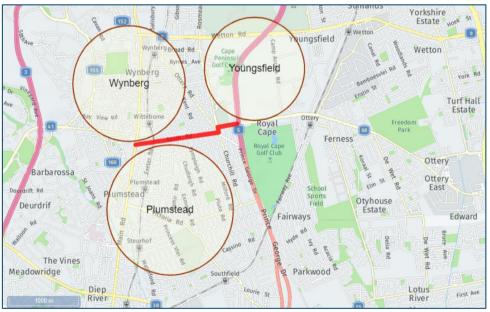


Figure 24. Residential Areas (Source, Urban-Econ, 2024)

Wynberg's residential properties primarily consist of freehold and sectional title units, with a relatively high standard of living. The area has a stable community, with over half of residents having lived there for 11 years or more. While most property owners are aged 50 and above, 71% of recent buyers are between 18 and 49 years old. This stability benefits local businesses and property values. As of 2023, the median price for sectional title properties was R1.2 million, while freehold properties averaged R2.0 million (Urban-Econ, 2024).

Plumstead's residential properties mainly consist of freehold and sectional title units, with a relatively high standard of living. The area has a stable community, with 55% of residents having lived there for 11 years or more. While most property owners are aged 50 and above, 41% of recent buyers are between 36 and 49 years old. This stability supports local businesses and property values. As of 2023, the median price for sectional title properties was R1.1 million, freehold properties averaged R2.6 million, and vacant land was priced at R869,000 (Urban-Econ, 2024).

The Property Report (June 2023) prepared by HHO indicates that 95 properties are affected by the W8 development. These properties are divided into state-owned and privately owned:

State-owned properties: 73 properties (no formal land acquisition required for these).

- Approximately 17 of the state-owned properties were occupied as of October-November 2023, with tenants undergoing a legal eviction process by the City of Cape Town (CCT) in accordance with the legal and protocol requirements.
- Buildings / structures on 30 state-owned properties will require demolition.

#### Privately owned properties: 22 properties.

- 12 properties will require full acquisition while 10 properties will require partial acquisition.
- Existing buildings on 19 privately owned properties will require demolition.
- The City of Cape Town will be bound by the legal and policy requirements in relation to property acquisition and demolition.

Table 4. Demolition of existing infrastructure on privately owned properties (source: Barbour, 2024)

	PHYSICAL ADDRESS	ERF NO	OWNERSHIP	PROPERTY IMPACT
01	51 Main Road, Plumstead, Cape Town	67610-RE	Private	Partial
02	140B Ottery Road, Wynberg, Cape Town	69402	Private	Partial
03	6 South Road, Wynberg, Cape Town	69404-RE	Private	Partial
04	14 Waterbury Road, Plumstead, Cape Town	70089	Private	Full
05	4 Ashbury Road, Plumstead, Cape Town	70693	Private	Partial
08	3 Chudleigh Road, Plumstead, Cape Town	71779-RE	Private	Full
09	3 Stella Weg, Plumstead, Cape Town	71798	Private	Partial
10	5 Lympleigh Road, Plumstead, Cape Town	71815	Private	Partial
11	5 South Road, Plumstead, Cape Town	71850	Private	Full
12	3 South Road, Plumstead, Cape Town	71851	Private	Full
14	1 Woodley Road, Plumstead, Cape Town	74065	Private	Partial
15	4 Milford Road, Plumstead, Cape Town	74132	Private	Partial
16	6 Pluto Road, Plumstead, Cape Town	74177	Private	Full
17	8 Pluto Road, Plumstead, Cape Town	74178	Private	Full
18	81 Prince George Drive, Wynberg, Cape Town	90491	Private	Full
19	79 Prince George Drive, Wynberg, Cape Town	90492	Private	Full
20	85 Prince George Drive, Wynberg, Cape Town	90500-RE	Private	Partial
21	152 Ottery Road, Wynberg, Cape Town	90527	Private	Full
22	154 Ottery Road, Wynberg, Cape Town	90528	Private	Full

Table 5. Demolition of existing infrastructure on state owned properties (source: Barbour, 2024)

	PHYSICAL ADDRESS	ERF NO	OWNERSHIP	PROPERTY IMPACT
27	142 South Road	69403-RE	Public	Full
28	55 Main Road	70082-RE	Public	Full
32	8 Waterbury Road	70086	Public	Full
33	10 Waterbury Road	70087	Public	Full
34	12 Waterbury Road	70088	Public	Full
37	18 Waterbury Road	70092	Public	Full
38	20 Waterbury Road	70093	Public	Full
39	32 Exeter Road	70094	Public	Full
40	34 Exeter Road	70095-RE	Public	Full
43	2 Ashbury Road	70692	Public	Full
44	3 Brampton Road	70697	Public	Full
45	93 South Road	70698	Public	Full
47	87 South Road	70700	Public	Full
48	85 South Road	70701	Public	Full
49	83 South Road	70702	Public	Full
52	4 Honiton Road	70705	Public	Full
53	3 Ashbury Road	70715	Public	Full
56	4 Chudleigh Road	71749	Public	Full
57	3 Honiton Road	71760	Public	Full
63	4 Lympleigh Road	71783	Public	Full
68	3 Lympleigh Road	71816	Public	Full
69	4 Pluto Road	71817	Public	Full
72	4 Woodley Road	71829	Public	Full
73	3 Pluto Road	71835	Public	Full
81	3B Chudleigh Road	73541-RE	Public	Full
85	55 South Road	74219	Public	Full
86	16B Waterbury	74247	Public	Full
	Road			
90	4 Napier Road	90494	Public	Full
91	83 Prince George	90501	Public	Full
	Drive			
92	1 Napier Road	90504	Public	Full

#### **SOCIO-ECONOMIC OVERVIEW**

#### **Population**

The population of Plumstead in 2011 was 20 178 made up of 7 080 households. The average household size was 2.8512. The figure for Wynberg was 14 472 made up of 5 127 households. The average household size was 2.82.

The majority of the population in 2011 in Plumstead were Whites (54.5%), followed by Coloureds (28.8%), Black Africans (10.4%), and Asians (2.5%) (Table 3.1). In Wynberg the majority of the population in 2011 were Coloureds (46.1%), followed by Whites (23.9%), Black Africans (21.2%), and Asians (3.4%) (Table 3.2). The changes in the demographic profile since 2011 are likely to reflect an increase in the percentage of Coloured and Black African's. This will be confirmed when the 2021 Census data becomes available. Based on the population group figures the main languages are likely to be English and Afrikaans.

The population of the Khayelitsha/Mitchells Plain planning district is approximately 1 443 286, while the number of households is 397 204 (Urban-Econ, 2024).

In terms of age structure for Plumstead, 16.3% were between 0 and 14 years of age, 69.2% fell within the 15 – 64 age group (economically active group), and 14.5% were older than 65 years of age (**Table 6**). The figures for Wynberg were 18.4% were

between 0 and 14 years of age, 71.2% fell within the 15 – 64 age group (economically active group), and 10.5% were older than 65 years of age (**Table 7**). Based on this data the dependency ratio for Plumstead and Wynberg was 44.5 and 40.5 respectively in 2011. These are marginally higher and lower than ratio of the City of Cape Town (43.6%) and lower than the provincial rate (45%). The national rate in 2011 was 52.7%. The age profiles and low dependency ratio reflect a large economically active population.

Within the Khayelitsha/Mitchells Plain region 71% of the population are between the ages of 15 and 64. The young population of the Khayelitsha/Mitchells Plain planning district is greater (26 percent) than that of the other two focus areas Urban-Econ, 2024). This indicates that in the future there will be a significant labour supply in this area, which could, with the proposed development, benefit the local economies in the surrounding suburbs, and the Southern Region (Urban-Econ, 2024)

A lower dependency ratio implies less pressure on the working age portion of the population to support economic dependents (children and aged) (Barbour, 2024). This also has social, economic, and labour market implications. In this regard lower dependency ratio is often associated with a relative increase in the working age population, which in turn, can result in increased tax revenues and a reduction in inequality and economic hardship (Barbour, 2024). At a municipal level, the increase in the working population results in a larger tax base from which local authorities can collect revenue for basic services rendered (Barbour, 2024). This improves the financial sustainability of municipalities (Barbour, 2024).

Table 6. Plumstead Population Indices (source: Barbour, 2024)

Population	M	Male		Female		I
	Total	%	Total	%	Total	%
Black African	1 010	5.0%	1 080	5.4%	2 090	10.4%
Coloured	2 661	13.2%	3 160	15.7%	5 821	28.8%
Asian	254	1.3%	257	1.3%	511	2.5%
White	4 961	24.6%	6 035	29.9%	10 996	54.5%
Other	370	1.8%	390	1.9%	760	3.8%
Total	9 256	45.9%	10 922	54.1%	20 178	100.0%
Source: Census 2011					<u>'</u>	'

Table 7. Wynberg Population Indices (source: Barbour, 2024)

Population	Male		Fem	Female		I
	Total	%	Total	%	Total	%
Black African	1 511	10.4%	1 551	10.7%	3 062	21.2%
Coloured	3 154	21.8%	3 522	24.3%	6 676	46.1%
Asian	245	1.7%	242	1.7%	487	3.4%
White	1 566	10.8%	1 893	13.1%	3 459	23.9%
Other	384	2.7%	404	2.8%	788	5.4%
Total	6 860	47.4%	7 612	52.6%	14 472	100.0%

#### Commercial

The proposed route's arrives in Wynberg along Main Road, one of the area's most active commercial hubs. With a dense concentration of retail stores, business offices, and restaurants, Wynberg CBD serves as a key economic centre for residents and visitors alike (Urban-Econ, 2024).

Maynard Mall is a prominent shopping destination in the region with essential services such as the Wynberg Home Affairs office and Zone Fitness gym. Additionally, the mall has a diverse retail offering—including national brands (Urban-Econ, 2024).

Beyond Maynard Mall, Main Road accommodates a variety of commercial activities, including apartment buildings, fast-food outlets, second-hand car dealerships, and independent retailers specializing in clothing and electronics.

#### **Employment**

The official unemployment rate for Plumstead in 2011 was 5.74%. The highest unemployment level affects Black Africans (9.45%), followed by Coloureds (5.74%) and Whites (4.93%) (**Table 8**). The figure for Wynberg in 2011 was 9.17%. The highest unemployment level affects Black Africans (12.85%), followed by Coloureds (10.76%) and Whites (3.463%) (**Table 9**). The unemployment levels are significantly lower than the rate for the Western Cape (21.6%) and City of Cape Town (25.9%). This reflects the middle to upper income character of the area.

However, figures should also be viewed with the context of the latest unemployment data. Figures released by Stats South Africa for the first quarter in 2022 indicated that South Africa's unemployment rate was 34.5%, one of the highest in the world. The youth unemployment rates were even higher, namely 63,9% for those aged 15-24 and 42.1% for those aged 25-34 years. The COVID-19 pandemic is also likely to have resulted in an increase in unemployment rates in the City of Cape Town, including the suburb of Plumstead and Wynberg.

Table 8. Plumstead Employment Indices (source: Barbour, 2024)

Labour Force Indicators	Black African	Coloured	Asian	White	Other	Total
Population aged 15 to 64 years	1 551	4 116	369	7 407	531	13 974
Labour Force	984	2 979	267	5 289	363	9 882
Employed	891	2 808	258	5 028	330	9 315
Unemployed	93	171	9	261	33	567
Not Economically Active	567	1 137	102	2 118	168	4 092
Discouraged Work-seekers	9	42	o	54	0	105
Other not economically active	558	1 095	102	2 064	168	3 987
Rates %						
Unemployment rate	9.45%	5.74%	3.37%	4.93%	9.09%	5.74%
Labour absorption rate	57.45%	68.22%	69.92%	67.88%	62.15%	66.66%
Labour Force participation rate	63.44%	72.38%	72.36%	71.41%	68.36%	70.72%

Table 9. Wynberg Employment Indices (source: Barbour, 2024)

Labour Force Indicators	Black African	Coloured	Asian	White	Other	Total	
Population aged 15 to 64 years	2 286	4 620	369	2 493	531	10 299	
Labour Force	1 518	3 177	243	1 905	357	7 200	
Employed	1 323	2 835	219	1 839	324	6 540	
Unemployed	195	342	24	66	33	660	
Not Economically Active	768	1 443	126	588	174	3 099	
Discouraged Work-seekers	69	63	6	27	6	171	
Other not economically active	699	1 380	120	561	168	2 928	
Rates %							
Unemployment rate	12.85%	10.76%	9.88%	3.46%	9.24%	9.17%	
Labour absorption rate	57.87%	61.36%	59.35%	73.77%	61.02%	63.50%	
Labour Force participation rate	66.40%	68.77%	65.85%	76.41%	67.23%	69.91%	

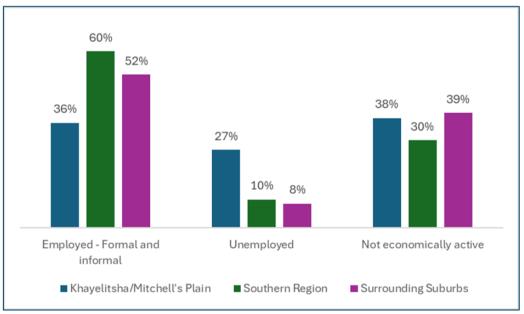


Figure 25. Employment (2023) (source: Urban-Econ, 2024)

The employment figures for the three areas noted in **Figure 25** further illustrate the economic conditions there. Employment is lowest in the Khayelitsha/Mitchells Plain planning district, indicating a need for increased economic opportunities in this area (Urban-Econ, 2024). The employed populations in surrounding suburbs and the Southern Region are high, indicating the presence of such economic opportunities (Urban-Econ, 2024). The non-economically active population is highest in the surrounding suburbs, which may be a consequence of the large population of individuals aged 65 and older (Urban-Econ, 2024). This indicates a need for labour in this area, which could be more easily accessible if the proposed route of expansion is completed (Urban-Econ, 2024).

While there's a higher proportion of informal sector employment in Khayelitsha/Mitchells Plain (22%) compared to the Southern region (15%), both areas predominantly exhibit formal sector employment. The Southern region demonstrates a slightly greater dominance of formal employment, constituting approximately 85 percent of economic activity, suggesting a stronger presence of established businesses and industries. However, informal employment persists in the Southern area, albeit at a lower percentage of around 15 percent, indicating some level of informal economic activity.

There are more skilled workers in the Southern region, but the Khayelitsha/Mitchells Plain planning district has higher proportions of semi- and low-skilled workers (52% and 27% respectively). In the Khayelitsha/Mitchells Plain planning district, just over 50 percent of the population are semi-skilled. This, combined with the higher unemployment rate in this area indicates a need for employment opportunities and the ability to take advantage of such opportunities by members of these communities (Urban-Econ, 2024).

#### Household Income

Household income levels are a basis for determining poverty levels in a community. The level of household income in a study area is indicative of social welfare, and the capacity to purchase goods and services and provides insight into the economic behaviour of a community. The 2011 Census data provides insight into the income distribution of households in the affected areas:

#### Plumstead:

- 7.7% of households had no formal income.
- 4.9% earned between R1 and R1 600 per month.
- 5.2% earned between R1 601 and R3 200 per month.
- Total of 17.8% of households earn R3 200 or less, which is below the poverty line as defined by the World Bank Development Research Group.

#### Wynberg:

- 10.0% of households had no formal income.
- 7.9% earned between R1 and R1 600 per month.
- 7.6% earned between R1 601 and R3 200 per month.
- Total of 25.5% of households earn R3 200 or less, highlighting higher levels of financial vulnerability compared to Plumstead

#### **Claremont:**

• Significantly lower percentage of households below the poverty line, reflecting its middle to upper-income demographic.

# City of Cape Town (CCT) overall:

 47% of households had a formal income below R3 200 per month, indicating a high level of economic vulnerability citywide.

# Higher income brackets:

• 43.1% of Plumstead households and 38.1% of Wynberg households earn between R12 801 and R51 200 per month, showing a notable proportion of middle-income earners in these suburbs.

The data highlights economic disparities and the reliance of vulnerable households, particularly Black African and Coloured communities in Plumstead, on social grants. This also has implications for local economic activity, tax revenue, and municipal financial sustainability.

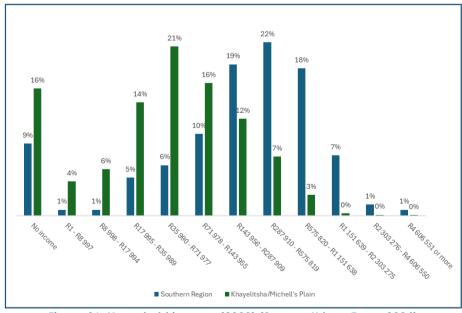


Figure 26. Household income (2023) (Source: Urban-Econ, 2024)

The income distribution between the Khayelitsha/Mitchells Plain planning district and the Southern region differs significantly. In Khayelitsha/Mitchells Plain, 16% of households have no income, compared to 9% in the Southern region. Among incomeering households, the majority in Khayelitsha/Mitchells Plain (61%) fall within the low-income bracket, with 21% earning

between R35,990 to R71,977. In contrast, 22% of households in the Southern region earn between R287,910 to R575,819, and only 21% are classified as low income. Furthermore, 28% of Southern region households are categorized as high income, compared to just 3% in Khayelitsha/Mitchells Plain. This highlights the greater economic opportunities in the Southern region compared to Khayelitsha/Mitchells Plain (Urban-Econ, 2024).

The top three contributing sectors to the economies of the Khayelitsha/Michells Plain planning district and the Southern region are finance, insurance, real estate, and business services (43 percent and 22 percent, respectively), wholesale and retail trade, catering and accommodation (16 percent and 12 percent, respectively), and manufacturing (17 percent) in Khayelitsha and community, social and personal services in the Southern region (Urban-Econ, 2024).

#### Education

The 2011 Census data on education levels in Plumstead and Wynberg highlights a well-educated population compared to the City of Cape Town overall:

# No schooling:

- Plumstead: 0.3% of the population over 20 years of age.
- Wynberg: 0.5% of the population over 20 years of age.
- Slightly higher figures for Black African individuals (0.4% in Plumstead and 0.6% in Wynberg), though still very low.

#### Matric (Grade 12) completion:

- Plumstead: 36.2% of the population over 20 years.
- Wynberg: 35.9% of the population over 20 years.
- Significantly higher than the City of Cape Town average (29.87%).

#### Higher education qualification (post-matric):

- Plumstead: 39% of the population over 20 years.
- Wynberg: 33.8% of the population over 20 years.
- More than double the City of Cape Town average (16.6%).

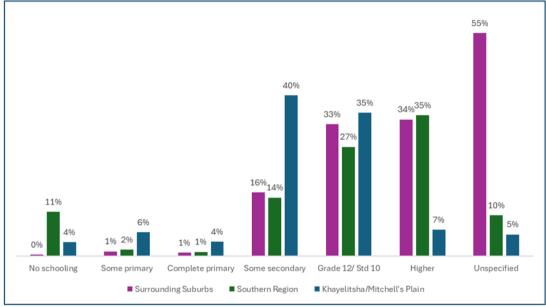


Figure 27. Educational Attainment (2023) (Source: Urban-Econ, 2024)

As can be seen in the figure above, the proportion of individuals with some higher education is highest in the Southern region, followed closely by the surrounding suburbs (Urban-Econ,2024). A large proportion of individuals in the Khayelitsha/Mitchells Plain planning district have some higher education or have completed grade 12 (Urban-Econ,2024). Thirty-five percent of people living in the Khayelitsha/Mitchells Plain planning district have completed their secondary education, while only 7 percent have higher education qualifications (Urban-Econ,2024). The Southern region has the lowest percentage of individuals who have completed their secondary education (27 percent), but the highest percentage of individuals who have post-matric qualifications (35 percent). In the surrounding suburbs, the figures are similar to the Southern region, with 49 percent having completed some secondary education or grade 12, and 34 percent having completed higher education (Urban-Econ,2024).

These figures reinforce that Plumstead and Wynberg are middle to upper-income areas with strong access to educational resources (Barbour, 2024). The high levels of matric and tertiary qualifications indicate better employment prospects and economic stability compared to citywide averages (Barbour, 2024).

There is a high concentration of educational institutions, particularly in Wynberg East, where five primary schools—Douglas Road Primary, Muhammadeyah Primary, Saint Augustine's, Dominican School for Deaf Children, and Immaculata RK Secondary—are within walking distance (Urban-Econ, 2024). This proximity allows for safer, more convenient access for

younger children traveling to school (Urban-Econ, 2024). Additionally, Wynberg East is home to Wynberg High School, Darun Na'im Academy, Focus College, Ottery Road Primary, Wittebome High, and Busy Bees Pre-school. To the west of Main Road, educational facilities include Saint Martini Wynberg German Kindergarten, Springfield Convent Senior School, Wynberg Girls High, Wynberg Boys Junior, and Wynberg Boys High (Urban-Econ, 2024).

Plumstead, though primarily residential, features Norman Henshilwood High, Timour Hall Primary, Oakley House Primary, and Plumstead High School, all positioned near Main Road or South Road(Urban-Econ, 2024).

#### Type of Dwelling and Tenure Status

In terms of dwelling type, 98.7% and 99% and of households in Plumstead and Wynberg live in formal dwellings respectively, while only 0.3% and informal dwellings were reported. This indicates that Plumstead and Wynberg are established, middle to upper income suburbs (Barbour, 2024).

In terms of tenure status, 31% and 28.7% of properties/ dwellings were owned and fully paid off, while a further 33.3% and 18.4% were owned, but in the process of being paid off, and 33.3% and 49.1% were rented respectively. Only 1.1% and 2.2% of dwellings were occupied rent-free.

These figures indicate that Plumstead and Wynberg have a stable middle-income population with a reliable source of income that has enabled them to purchase property and or rent accommodation (Barbour, 2024). The figures also indicate that the area has high percentage of rental properties, specifically Wynberg (49.1%) (Barbour, 2024).

#### Household Expenditure

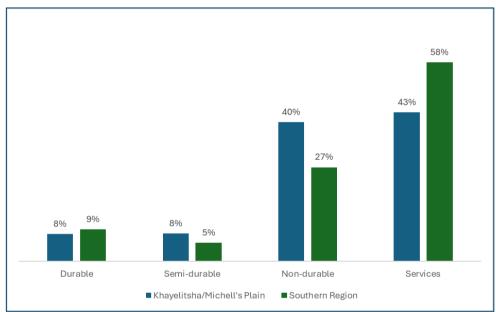


Figure 28. Household Expenditure (2023) (source: Urban-Econ, 2024)

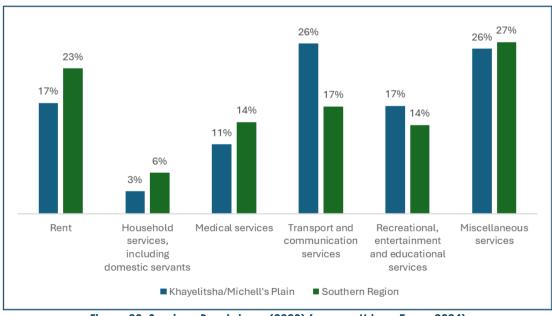


Figure 29. Services Breakdown (2023) (source: Urban-Econ, 2024)

Both residents of the Southern region and the Khayelitsha/Mitchells Plain planning district allocate the majority of their income to services. However, the proportion of income spent on non-durable goods is significantly higher in the Khayelitsha/Mitchells Plain planning district. The following figure provides a detailed breakdown of service expenditure for these two regions, offering further insight into this key aspect of spending.

Urban-Econ (2024) notes that households in the Khayelitsha/Mitchells Plain planning district allocate more of their income to services than any other category of goods, with transport services being the largest expense. While households in the Southern region spend 17% of their income on transport, this figure rises to 27% for those in the Khayelitsha/Mitchells Plain planning district. This highlights a key benefit of the proposed development for residents of Khayelitsha and Mitchell's Plain. The expansion will offer more affordable transport options to areas with greater economic opportunities, potentially helping to reduce high unemployment levels and the proportion of income spent on transport (Urban-Econ, 2024).

#### **Municipal Services**

In terms of municipal services, 99.2% and 98.8% of households in Plumstead and Wynberg had access to piped water in their dwelling or inside their yard respectively, 98% and 99.1% of households had access to a flush toilet connected to the public sewer system, and 99% and 99.3% of households had their refuse removed at least once a week.

This information indicates that Plumstead and Wynberg are formal, well established urban areas that are well provided for in terms of municipal services (Barbour, 2024).

#### Local Recreational and Social Facilities

The proposed route's alignment through Wynberg and Youngsfield will not only improve access to educational and commercial centres but also enhance connectivity to key recreational and social facilities (Urban-Econ, 2024).

Maynard Mall's Fives Futbol, a rooftop 5-a-side football arena, is a well-utilized facility for local leagues and casual matches. Nearby, Maynardville Park, home to the Maynardville Open-Air Theatre, provides a unique cultural and recreational space, hosting outdoor performances and public events. Additionally, Wynberg Park, Kemms Road Park, and Sussex Road Park offer green spaces for relaxation, outdoor activities, and community gatherings. Among these, Wynberg Park stands out as a popular destination with scenic ponds, walking trails, braai areas, and child-friendly play zones, making it an inclusive space for families, dog walkers, and visitors with mobility challenges (Urban-Econ, 2024).

Youngsfield serves as a significant hub for sports and recreation. The Wynberg Swimming Pool, Golf Village Wynberg, Wynberg Cricket Club, and Royal Cape Golf Club cater to diverse sporting interests, while William Herbert Sports Ground, one of the largest recreational venues in the area, provides well-maintained soccer, netball, and field sports facilities, complete with floodlights for evening activities (Urban-Econ, 2024).

The improved connectivity offered by the proposed route will extend these opportunities to communities in Mitchells Plain, Khayelitsha, and the broader Cape Flats region, where access to high-quality recreational facilities is often limited. For residents from areas such as Ottery, Philippi, and Strandfontein, these facilities are more than just leisure spaces—they offer avenues for social cohesion, skill development, and even professional sporting prospects (Urban-Econ, 2024). By linking these communities to established sports and recreational hubs, the route has the potential to foster healthier lifestyles, encourage youth engagement, and strengthen social ties across the city (Urban-Econ, 2024).

# Local Hospitals

The proposed route will enhance access to a variety of medical facilities in the surrounding areas, providing both residents and visitors with improved healthcare connectivity. Key facilities include:

# Healthcare Facilities in Wynberg:

- Victoria Hospital (Alphen Hill Road) The largest public hospital in the area, situated on the western side of Wynberg. It is easily accessible from Main Road, offering a wide range of services.
- Wynberg Clinic (Main Road) Located slightly south of Maynard Mall, this facility provides essential primary healthcare services to the community.
- Moosa Medical Centre (Broad Road) Situated to the east of the Wynberg Clinic, this center offers a variety of general medical services.

## Healthcare Facilities in Plumstead:

- Mediclinic Constantiaberg (Plumstead) The largest private hospital in the region, offering a comprehensive range
  of medical services, including emergency care, mother and child services, specialized treatments like epilepsy care,
  hematology and bone marrow transplant, neuroscience, and joint replacement. It also hosts various specialized
  clinics.
- Plumcare Medicentre (Gabriel Road) & Plumstead Medical Centre (Victoria Road) Both offer general medical services to the local population.
- Additional practices close to Main Road include Hawkesbury Practice Medical Centre and Staines Road Practice, further enhancing healthcare accessibility in the area.

The areas offer both public and private hospitals with a variety of medical services, meeting the healthcare needs of the community. This accessibility provides reassurance to residents in more distant areas like Khayelitsha, Mitchells Plain, and the Cape Flats, who have fewer healthcare options (Urban-Econ, 2024). The reliable healthcare infrastructure ensures quality

treatment and a broader range of services, benefiting the wider community by improving overall well-being (Urban-Econ, 2024).

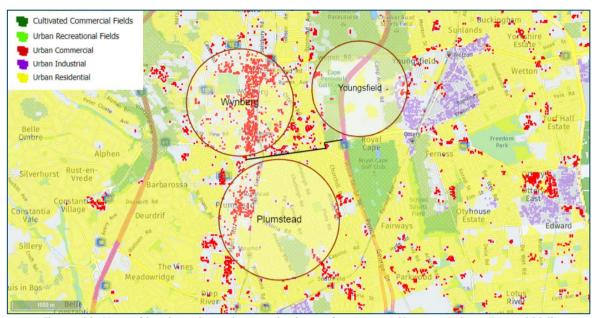


Figure 30. Map of land use in and around primary focus area (Source: Urban-Econ, 2024)

# Waterbury Road

The route section between Main Road and the railway line along Waterbury Road traverses a residential area. Waterbury Road is a quiet, residential road that is flanked by residential properties to the south and flats, with a few residential properties to the north. Most of the properties located to the south of Waterbury Road are owned by the CCT, with the exception of one property (Barbour, 2024).

#### South Road

This portion of the proposed roadway follows the alignment of South Road from Castletown Road in the west to Ottery Road in the east. South Road forms the boundary of Wynberg East (to the north) and Plumstead (to the south). During the apartheid era Wynberg East was designated as a Coloured are in terms of the Group Areas Act, while Plumstead was a White residential area (Barbour, 2024). South Road effectively formed the boundary between the two areas. The properties in Wynberg East are generally smaller than the properties in Plumstead, and the area is more densely populated (Barbour, 2024). The households in Wynberg East can also be classified as a lower income compared to the households in Plumstead (Barbour, 2024). In addition to having larger erven, Plumstead is treed, which creates a softer interface between the streetscape and adjacent properties (Barbour, 2024). This is a legacy of apartheid (Barbour, 2024).

The properties located along the northern boundary of South Road face directly onto the road. Many properties have small or no front garden, and the front door and street facing rooms are located within 2-3 m of the pavement (Barbor, 2024). This is typical of many similar suburbs Cape Town, such as Observatory, Woodstock, and Salt River. The proximity of the houses to the road, specifically to the north, also speaks to the nature of South Road, which currently functions as a minor road located within an established, relatively densely populated residential area (Barbour, 2024). However, the existing rights of the established road reserve must be recognised. The establishment of the proposed project and the suitability of the alignment from a local social perspective should be viewed within this context. Two shops are located on South Road, Royal Café II and Abdullah's Shop at the intersection of South Road and Ottery Road (Barbour, 2024).

# Otterv Road to M5

The portion from Ottery Road to Kromboom Parkway (M5) impacts on a large second-hand car dealership (Wynberg Used Cars) and residential properties located along the Ottery Road Service Road. Abdullah's Shop will also be impacted by the proposed project.

Please refer to **Appendix G1** to view the Social Impact Assessment with associated images of the proposed route.

# **ALIGNMENT WITH POLICY FRAMEWORKS**

<u>The socio-economic specialist also considered alignment with policy frameworks (as detailed below). This corroborates the need and desirability conclusions of the EAP (detailed in **Section E12**).</u>

The expansion of the MyCiTi Integrated Rapid Transit (IRT) system aligns with a range of national, provincial, and local policies aimed at fostering economic growth, spatial transformation, and social inclusion. According to the National Development Plan 2030, the development of road infrastructure contributes to the broader goal of eradicating poverty and inequality through faster economic growth, higher investment, and job creation (Urban-Econ, 2024). This is supported by the Medium-Term Strategic Framework 2019-2024, which emphasizes the importance of promoting social cohesion and creating safer communities, thus aligning with the goal of fostering a sense of community and inclusion (Urban-Econ, 2024). Similarly, the National Spatial Development Perspective 2006 highlights the importance of focusing investment in areas with high economic potential, suggesting that the road network expansion should stimulate sustainable economic growth in key regions, attracting private-sector investments and creating long-term employment opportunities (Urban-Econ, 2024). The Integrated Urban

Development Framework 2016 emphasizes the need for better spatial integration, which the MyCiTi system directly supports by improving connectivity between urban nodes, thereby enhancing accessibility and economic opportunities for residents in outlying areas (Urban-Econ, 2024).

At the provincial level, the Western Cape Provincial Strategic Plan 2019-2024 outlines key priorities, such as boosting the economy and job creation, which the proposed development directly supports through its focus on transportation infrastructure, enhancing mobility, and providing better access to resources (Urban-Econ, 2024). The Western Cape Spatial Development Framework 2014 further complements this vision by advocating for clustering economic infrastructure along public transport routes, thereby optimizing the use of public investments and ensuring accessibility to employment and recreational facilities for more residents (Urban-Econ, 2024). At the local level, the City of Cape Town Integrated Development Plan 2022-2027 outlines the city's priorities, including economic inclusion, resource efficiency, and safe communities, all of which are supported by the proposed IRT system (Urban-Econ, 2024). The project will enable more efficient commuting, thus enhancing access to essential services and contributing to the overall well-being of residents.

The proposed Integrated Rapid Transit (IRT) Phase 2A system aligns with these objectives by facilitating efficient transportation, fostering community connectivity, and promoting economic opportunities, especially for the individuals from the Khayelitsha and Mitchells Plain planning district (Urban-Econ, 2024). It enhances access to essential services, educational institutions, and recreational facilities, thereby improving the quality of life for residents (Urban-Econ, 2024).

Moreover, the proposed development supports broader goals of spatial integration, economic transformation, and sustainable urban development, as articulated in the various policy frameworks (Urban-Econ, 2024). By prioritising investments in strategic areas and promoting inclusive growth, this project contributes to building inclusive communities (Urban-Econ, 2024). Essentially, the proposed network represents steps towards achieving the vision of prosperity, equity, and sustainability outlined in South Africa's development plans and local strategies (Urban-Econ, 2024).

# 8.2. Explain the socio-economic value/contribution of the proposed development.

The proposed development holds significant socio-economic value and will contribute positively to both the local and broader communities (Barbour, 2024). Urban-Econ (2024) notes that the proposed development presents a significant boon for individuals traveling for educational, recreational, and employment purposes within the areas it traverses. By strategically connecting major suburbs, commercial hubs, and educational institutions, the route facilitates seamless access to various opportunities and amenities.

The spatial analysis undertaken by Urban-Econ (2024) reveals that the proposed route intersects key roads such as the M5, M4, and N2, linking southern and northern parts of Cape Town. This connectivity enhances regional accessibility and mitigates local traffic congestion, ensuring improved ease of access for commuters (Urban-Econ, 2024). By improving the public transport network, the project will enhance mobility and accessibility for residents, particularly in historically disadvantaged areas of the municipality. This will provide residents with better access to employment opportunities, healthcare, education, and other essential services, reducing travel times and costs associated with public transport (Barbour, 2024).

Additionally, the dedicated bus lanes and improved intersections will create a more efficient and reliable transport system, encouraging the use of public transport over private vehicles, which can reduce traffic congestion and carbon emissions (Barbour, 2024).

The concentration of educational facilities along the route, including primary and secondary schools, presents enhanced educational opportunities for households in Mitchell's Plain, Khayelitsha, and areas along the proposed route such as Phillipi, Ottery and Strandfontein. With numerous schools within walking distance, the route promotes safety and accessibility for students (Urban-Econ, 2024).

The proximity to healthcare facilities, both public and private, ensures comprehensive medical services for residents, enhancing overall well-being and healthcare accessibility. In essence, the proposed development not only addresses transportation needs but also serves as a catalyst for economic development, cultural enrichment, and improved quality of life for communities along its path (Urban-Econ, 2024).

The development also supports the creation of job opportunities during both the construction phase and through long-term operational requirements, including the maintenance of the upgraded infrastructure and public transport systems (Barbour, 2024). the route's alignment to commercial hubs like Wynberg CBD offers convenient access to retail stores, business offices, and restaurants, fostering economic activity and employment prospects for residents (Urban-Econ, 2024).

Furthermore, the proposed non-motorised transport (NMT) routes, such as sidewalks and cycle lanes, promote healthier and more sustainable modes of transport, contributing to the well-being of the local population (Barbour, 2024). Additionally, the presence of recreational and social facilities such as Maynardville Park, Wynberg Park, and sporting clubs enriches the quality of life for commuters, providing avenues for leisure and community engagement (Urban-Econ, 2024).

Overall, the proposed development will foster economic growth and social equity, benefiting not only the local communities but the city as a whole, by supporting the City of Cape Town's broader goals for integrated and inclusive urban development. The improved access to educational, health, and recreational facilities is a vitally important benefit, as it not only provides more choices to people living in Khayelitsha and Mitchell's Plain, but also provides a safe, comfortable, and fast way to get to these locations. Due to the large reliance on public transportation for lower-income households living in the urban peripheral areas of Khayelitsha and Mitchells Plain, this may provide the only access to these areas which is safe, reliable, and comfortable, in addition to being cheaper and faster than traditional public transport from these areas (Urban-Econ, 2024).

# **ECONOMIC BENEFITS**

The economic benefits of the proposed MyCiTi IRT system extend beyond the local area to neighbouring districts and peripheral areas like Khayelitsha and Mitchells Plain. Expanding public transport networks that are safe, reliable, and affordable, such as the MyCiTi IRT, positively impacts local economies and benefits individuals who use the system to access greater opportunities for economic, recreational, health, and educational activities (Urban-Econ, 2024). Therefore, it is essential to consider the broader economic benefits when evaluating this segment of the proposed route.

Improving public transport networks is crucial for providing lower-income households in Cape Town with access to areas of greater economic activity. Many of these households live far from significant economic opportunities, limiting their ability to improve their economic well-being. The spatial distribution of economic opportunities in Cape Town reflects a legacy of inequality, but enhancing public transport systems can help mitigate the effects of this legacy and increase access to economic prospects (Urban-Econ, 2024).

The MyCiTi IRT system offers significant benefits beyond just providing access to economic opportunities for lower-income households. It is approximately 50% cheaper than minibus taxis for similar distances (Jaarsveld, 2023), which is crucial given that many lower-income households in Cape Town rely on public transport and face long, costly journeys to work. These households typically spend a large portion of their disposable income on transport, often between 15% and 30% (Kgwedi, 2022). By reducing transport costs, the MyCiTi system alleviates this economic burden. Additionally, the system's use of dedicated lanes reduces travel time, allowing commuters to spend more time on productive activities, further enhancing the economic advantages of the system (Kgwedi, 2022).

#### Anticipated positive impact based on Case Study:

The City of Cape Town enables improved public service provision through partnerships with designated City Improvement Districts (CIDs), where property owners pay additional rates to enhance safety, maintenance, and socio-economic development. The Cape Town Central City Improvement District (CCID), established in 2000, aimed to reduce crime, improve cleanliness, and promote socio-economic development, leading to increased investment and economic opportunities. As a result, the City Centre contributes over 70% of the Western Cape's GDP, supported by accessible public transport.

The MyCiTi IRT system, introduced in 2010 for the FIFA World Cup, has played a crucial role in this success. The system connects residential areas to economic, recreational, and health hubs, offering a cheaper, faster, and safer alternative to traditional public transport. Its success helped improve the CCID by providing an alternative to the dysfunctional rail system (Urban-Econ, 2024).

Wynberg CBD, also a designated City Improvement District, has not achieved the same level of success as the Cape Town CBD. However, the introduction of a reliable public transport system, such as the expansion of the MyCiTi IRT, would enhance economic access for residents of Khayelitsha and Mitchells Plain, benefiting both households and businesses in Wynberg, Plumstead, and surrounding areas (Urban-Econ, 2024). This would contribute to long-term socio-economic development.

Further socio-economic aspects of the proposed development are included in Table 10.

Table 10: Socio-economic aspects of the proposed development

What is the expected capital value of the project on completion?	Approximately <b>R550 000 000.0</b>	00 (ex VAT) (Barbour, 2024)			
What is the expected yearly income or contribution to the economy that will be generated by or as a result of the project?	The contribution will be providing a subsidised public transpor system in the City of Cape Town which will help uplift the communities and help create an economic knock-on.				
Will the project contribute to service infrastructure?	YES	NO NO			
Is the project a public amenity?	YES	NO			
How many new employment opportunities will be created during the development phase?	to generate approximately a two-year period, with 45% al semi-skilled workers, and 15% significant portion of these Disadvantaged (HD) member important social benefit, challenges exacerbated by 2024).  While construction jobs are important to recognize that the project-based system where temporary jobs for their lived development, including the provide a valuable opportunity.	e proposed development is expected 300 employment opportunities over a clocated to low-skilled workers, 40% to 36 to skilled workers (Barbour, 2024). A opportunities will benefit Historically ers of the community, representing an particularly given the economic of the COVID-19 pandemic (Barbour, et al., 1997). The construction industry operates on a workers rely on a continuous stream of elihoods. In this context, each new proposed development, contributes to be sector. Additionally, the project will nity for the local building sector and further stimulating economic activity pour, 2024).			

# What is the expected value of the employment opportunities during the development phase?

The total annual wage bill for the proposed project is estimated to be approximately R44 million (based on 2023 Rand values) (Barbour, 2024). This calculation is based on the creation of 300 employment opportunities over a two-year period, with 45% (135 workers) categorized as low-skilled, 40% (120 workers) as semi-skilled, and 15% (45 workers) as skilled. The assumed average monthly wage for low-skilled, semi-skilled, and skilled workers is R8,000, R12,000, and R25,000, respectively (Barbour, 2024). Consequently, the total wage bill over the two-year period is expected to be around R88 million (Barbour, 2024). A significant portion of these wages will be spent within the local City of Cape Town economy, further contributing to economic activity and benefiting local businesses.

What percentage of this will accrue to previously disadvantaged individuals?

A significant portion of these opportunities will benefit Historically Disadvantaged (HD) members of the community, representing an important social benefit, particularly given the economic challenges exacerbated by the COVID-19 pandemic (Barbour, 2024).

The exact percentage would only be determined in the "Empowerment Management Plan" which is required as part of the Contractor's bid.

It is important to note that the applicant will comply with the Preferential Procurement Policy Framework Act 5 of 2000 and the Public Finance Management Act 1 of 1999.

# How will this be ensured and monitored (please explain):

The Environmental Management Programme (EMPr) stipulates that preference must be given to previously disadvantaged individuals for the majority of unskilled labour, as well as for skilled labour where feasible. Furthermore, in accordance with City policy, each IRT work package is expected to meet Contract Participation Goals (CPGs) which includes a prescribed percentage of employment of local labour through the Extended Public Works Programme (EPWP), and the opportunity for local contractors to subcontract their services. The Principal Contractor will therefore be responsible for recruiting targeted labour in line with contract specifications.

This recruitment must also comply with the City of Cape Town's procurement processes and requirements.

How many permanent new employment opportunities will be created during the operational phase of the project?

Given that the proposed development constitutes a small section of road, no direct operational employment opportunities would be created as nobody would "work on site" while the road is operational.

What is the expected current value of the

Indirectly, employment opportunities will be created, for example bus drivers and maintenance workers will be required for the route.

what is the expected current value of the employment opportunities during the first 10 years?

R0.00 for the proposed development as it is a roadway and will not generate direct employment opportunities during the operational phase.

What percentage of this will accrue to previously disadvantaged individuals?

Not Applicable

How will this be ensured and monitored (please explain):

Not Applicable

# Any other information related to the manner in which the socio-economic aspects will be impacted:

The project will improve accessibility and connectivity for the surrounding communities and businesses. Communities will benefit from safer, more efficient, reliable, and affordable access to economic opportunities. Additionally, businesses will enjoy better access for both staff and clients, which could enhance overall operational efficiency and growth.

8.3. Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.

The proposed development is a social initiative by the City of Cape Town, aimed at enhancing infrastructure and transport facilities for the surrounding communities. This initiative is designed to improve the quality of life for local residents by providing better access to essential services, economic opportunities, and improved connectivity.

8.4. Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.

The proposed development addresses several needs within the area, particularly the lack of affordable and reliable public transport, which currently hampers daily commuting for work and education. This initiative aligns with provincial and national priorities to improve accessibility and mobility. Additionally, it offers significant benefits for commercial and industrial activities in the area by enhancing connectivity.

Key opportunities presented by the development include:

- Developing vibrant areas by removing barriers to access.
- Improving connectivity across the metropolitan area.

- Increasing efficiency in the movement of people, aiding both commuters and development activities.
- Enhancing access and transportation routes, supporting future development and intensification of use.
- Reducing walking distances from residential areas and places of work to public transport facilities.
- Reinforcing convergence at core routes and access points.
- Strengthening the use of existing rail stations.

This project also presents an opportunity for the City of Cape Town to restructure and rejuvenate the south-east portion of the metro, an area previously neglected due to apartheid-era planning.

Impacts regarding well-being in terms of dust during the construction phase would be experienced in the short-term and would be **Low (-)** to **Very Low (-)**. Barbour (2024) rated the Potential noise, dust and safety impacts associated with movement of construction related traffic to and from the site as **Low (24)** with mitigation.

There are several positive operational phase impacts anticipated regarding aspects such as the following:

- Operation of the proposed route (i.e., the use of the route for public transport) would result in an increasing number of people making use of public transport over private transport. This would reduce the per capita emission of greenhouse gases in the surrounding community and beyond.
- Provision of improved accessibility for previously disadvantaged communities with respect to employment, economic centres and places of education and recreation.
- Improvements to safety for all those accessing the area via NMT.
- Improvements to traffic conditions in the area

Please refer to **Section G10** and **Section G11** below for a summary of the visual and noise impacts associated with the proposed development.

# 10. Visual Aspects

6.1.	Was a specialist study conducted?	YES	NO				
6.2.	2. Provide the name and/or company who conducted the specialist study.						
	A Visual Impact Assessment was conducted by David Gibbs. Reference to this assessment is hereafter referred to as (Gibbs, 2024) and the full report is included in Appendix G2						

6.3. Explain how areas that contain sensitive visual aspects have influenced the proposed development.

The receiving environment for the proposed development is situated within an urban built environment, predominantly comprising single-storey residential dwellings in the Southern Suburbs of the City of Cape Town (Gibbs, 2024). The study area benefits from views of the Peninsula Mountains to the west, approximately 6 kilometers away, as well as the more distant Boland Mountains, located around 36 kilometers to the east (Gibbs, 2024). This environment is considered an urban cultural landscape, shaped by social, economic, and administrative factors, and developed through human activity, occupation, and settlement in response to the natural surroundings. The land has been significantly modified by human influence, with everyday lives, social practices, and cultural values reflected in the physical characteristics of the area.

The study area is divided into three distinct portions by the Metrorail Southern Line. The westernmost portion of the study area, along Waterbury Road, stretches from the M4/Main Road to Exeter Road. The middle portion of the area, located along South Road, extends from Brampton Road to Ottery Road/Churchill Road. The easternmost portion spans from this point, crossing the challenging intersection between Ottery Road and Prince George Drive, reaching up to the M5. This division creates distinct spatial characteristics and connectivity challenges within the study area.

The acquisition and demolition of properties along the southern edge of South Road have already disrupted the visual and spatial continuity of the urban fabric, particularly considering that some of these properties have never been developed, as evidenced by aerial photographs (Gibbs, 2024). Despite this, the northern edge of South Road retains a relatively intact and consistent streetscape, predominantly comprising early to mid-20th-century buildings (Gibbs, 2024). However, the proposed development would necessitate the acquisition and demolition of approximately fifty additional properties, further disrupting the area's urban form (Gibbs, 2024).

Several community facilities in the vicinity, such as schools and places of worship, serve as local landmarks and contribute significantly to the area's character (Gibbs, 2024). Notably, the Corpus Christi Catholic Church on Castletown Road, opposite Wittebome Station, stands out (Gibbs, 2024). In a broader context, the area, with its mountainous backdrop, is regarded as a cultural landscape of moderate to high scenic, cultural, and historical significance (Gibbs, 2024).

The receiving environment encompasses built environment visual and heritage resources, with notable middle-distance views towards the Peninsula Mountains to the west and the Stellenbosch Mountains to the east, both of which have wilderness qualities (Gibbs, 2024). While the immediate vicinity does not feature areas with exceptional townscape qualities, it does include areas with a distinct character and sense of place, particularly the residential fabric and neighbourhood identity. Additionally, the environment incorporates sites of community and religious significance, further enhancing the area's cultural value (Gibbs, 2024).

Broadly, the receiving environment is recognized for its urban residential character and sense of place, offering moderate to high visual amenity (Gibbs, 2024). However, certain areas within the subject site have lower visual or landscape amenity, primarily due to the demolition of buildings (Gibbs, 2024).



Figure 31. Site Context (Gibbs, 2024)

#### Significance of Receiving Environment

Note: The below information has been summarised from (Gibbs, 2024))

The site is situated within an established neighbourhood characterized by a clear gridiron street/plot and block pattern, forming part of a vibrant and dynamic residential environment of moderate to high scenic, cultural, and historical significance. This area has a distinctive character, although portions of the subject site lack intrinsic value due to non-development or prior demolition, leaving behind urban 'wasteland.' However, the remaining streetscape exhibits a coherent composition that holds significance as a representation of early to mid-20th-century residential development, including its scale, density, and building typology. Based on the UNESCO operational guidelines for heritage site management, the receiving environment is considered an evolving built environment of medium to high significance.

Given this significance of the receiving environment, including surrounding neighbouring properties and community facilities, it can be considered highly susceptible to changes such as those proposed.

# Regional context: (background) (Gibbs, 2024)

Geographic landmarks:

Cape Peninsula Mountain (approximately 6km to the west) and

Boland Mountain ('approximately 36km to the east)

Urban cultural landscape character

# Local context: (mid-ground) (Gibbs, 2024)

Built Environment of urban resident cultural landscape character

Wynberg (east) / Wittebome to the north, slightly denser built fabric

Plumstead to the south, slighter 'greener' built fabric

South Road as interface between these two neighbourhoods.

Early to Mid-20th Century buildings - mostly single storey dwellings and corner shops

## Site context: (foreground) (Gibbs, 2024)

Early and Mid-20th Century buildings including dwellings and corner shops, with some mature trees and noteworthy buildings and community facilities (serving both Wynberg and Plumstead as local landmarks); including the Corpus Christi Catholic Church, St Augustine's Primary, Immaculata Secondary, the Dominican School for the Deaf, Wynberg Creche, Muhammadeyah Primary, Douglas Road Primary, Wynberg High, All Saints Anglican Church, and Abdullah's Food Centre



Figure 32. Visual resources Western Portion of site (source: Gibbs, 2024)



Figure 33. Visual Resources - Middle portion (A) (source: Gibbs, 2024)



Figure 34. Visual Resources - Middle portion continued (B) (source: Gibbs, 2024)



Figure 35. Visual Resources - Eastern Portion (source: Gibbs, 2024)

#### Landscape Character

Note: The below information has been summarised from (Gibbs, 2024))

The subject site presents a complex urban landscape that balances areas of lower visual amenity—where land has been cleared or left undeveloped—with spaces that contribute to the neighbourhood's character. While portions of the site lack intrinsic visual significance, the continuity of open space still serves functional and perceptual roles, providing informal parking, recreational areas for children, and key view corridors toward the surrounding mountain ranges.

Situated at the interface between Wynberg/Wittebome and Plumstead, the site exists within an evolving urban cultural landscape, shaped by layers of development and community use. These neighbourhoods, while distinct, share a residential character punctuated by local landmarks of medium to high visual significance. Plumstead, in particular, has a noticeably 'greener' character compared to Wynberg/Wittebome, with mature trees contributing to the environmental and aesthetic quality of the area.

At the regional scale, the Cape Peninsula mountains to the west and the Boland mountains to the east define the broader view-shed, reinforcing the area's sense of place. Locally, mature trees, such as the avenues along higher-order roads and the prominent Eucalyptus trees near Rosmead Avenue, provide structure and legibility to the urban grid.

The built fabric along South Road's northern edge remains relatively intact, contributing to a consistent streetscape punctuated by key landmarks such as the Catholic Church Hall, the Royal Café II, and Douglas Road Primary. The recognisable Wynberg Used Cars, though offering modest visual amenity, stands out as a notable reference point within the area.

Given this context, the landscape character analysis and accompanying photographic documentation will further illustrate the quality of the receiving environment and provide insight into how the proposed development may alter this urban cultural landscape.

Please refer to **Appendix G2** for images of the receiving landscape.

The project site is a low-lying area with a gentle slope, descending from approximately 35m AMSL at Main Road in the west to around 20m AMSL at the M5 interface in the east, over a 1.5km stretch (a subtle gradient of about 1/1000). While the immediate landscape appears flat, the Peninsula Mountains rise sharply 6km to the west, and the Boland Mountains are visible on the eastern horizon, approximately 36km away (Gibbs, 2024).

The site has a very gentle tilt, with the westernmost portion oriented eastward as it approaches the lower foothills of the Cape Granite Suite. The middle section shifts slightly southeast, while the easternmost portion tilts eastward before briefly turning southeast and ending with a slight southern orientation. These subtle undulations are barely noticeable. Geometrically, the site follows an east-west trajectory, running more or less perpendicular to the contours (Gibbs, 2024).

Although barely discernible at grade, the site slopes gently with a slightly concave form, from the west towards the east. Towards the west of the site, the landform begins to rise more sharply as the lower foothills of the Constantiaberg take on a convex form. When travelling in either direction, the eye is drawn to the mountainous horizon, with the distant Boland Mountain Ranges providing the eastern limit of the viewshed, and the more proximate Cape Peninsula mountains providing the western limit of the viewshed (Gibbs, 2024).

Wynberg/Wittebome (north of South Road) has a denser, tighter urban form, while Plumstead (south of South Road) has a looser, more open grain. Open spaces along South Road were intentionally designed as a buffer zone between the two neighbourhoods, a legacy of apartheid-era planning (Gibbs, 2024).

The subject site is situated within a broader cultural landscape that reflects its evolution as an urban residential environment. The area is positioned at the interface of different urban street grids, with some disruptions caused by infrastructure elements like railway lines and roadways. It also contains various commercial and community facilities, such as corner shops, attorney offices, schools, and places of worship like the Corpus Christi Catholic Church and its associated hall (Gibbs, 2024).

At present, the site maintains a quiet residential atmosphere, characterized by narrow streets and early-to-mid-20th-century single-storey buildings, which contribute to a consistent and relatively intact urban fabric (Gibbs, 2024). This development has been documented over time through aerial photography, which highlights the gradual changes in the cultural landscape (Gibbs, 2024).

# Landscape Character Sensitivity

Note: The below information has been summarised from (Gibbs, 2024)

The Landscape Character of the study area immediately to the north and south of the site is considered highly sensitive to visual impact as it is associated with residential areas and resources of visual amenity, whereas the Landscape Character of the broader urban context to the west of the site is considered moderately sensitive, given the mitigating effect of distance from the proposal.

The properties overlooking the buildings identified for demolition and immediately adjacent to the proposed rail overpass bridge (within 250 metres of the proposed infrastructure) are considered most highly sensitive in the extreme to impact, given the proximity to the proposal, and that these properties will be the most severely affected by the proposal.

#### <u>Visual Scenic Resources</u>

Note: The below information has been summarised from (Gibbs, 2024)

The site is located within a broader urban cultural landscape that encompasses areas, views, and resources of moderate to high scenic, cultural, and historical significance. These include the striking mountain background views, middle-distance views of the built environment, and foreground streetscape views. These elements contribute to the overall aesthetic and historical value of the area, shaping the sense of place and character of the landscape surrounding the site.

The continuity and relative intactness of the urban fabric, along with the absence of visual intrusions, significantly enhance the visual quality of the area. While the railway line has disrupted the east-west continuity of the neighbourhood, connections remain to the north (via the Rockley Road underpass) and south (via the Victoria Road Bridge). The residential character of the neighbourhood has been established for over a century, with several local landmark buildings adding to the cultural landscape's value. The site itself possesses moderate quality, while other aspects of the study area contribute to an excellent quality cultural landscape.

The site can be considered a view corridor, offering foreground streetscape views as well as middle-distance views towards the Cape Peninsula Mountains and background views towards the Boland Mountains. Additionally, the M5 Bridge provides a fleeting view over the site, while the elevated railway line, which passes over South Road (and Waterbury Road to the west and Brampton Road to the east), also provides a brief overhead perspective at approximately 2 meters above grade.

## Visual Setting

Note: The below information has been summarised from (Gibbs, 2024)

The areas shaded in green in **Figure 36** theoretically have direct views towards the site. The "View Catchment" diagram calculates visibility based solely on topography, or landform, and does not account for screening effects from existing structures or vegetation. If LIDAR data were available, which includes surface texture data such as buildings and trees, this would provide a more accurate view catchment by reducing the footprint of the visible area, reflecting the actual impact of physical features on visibility.

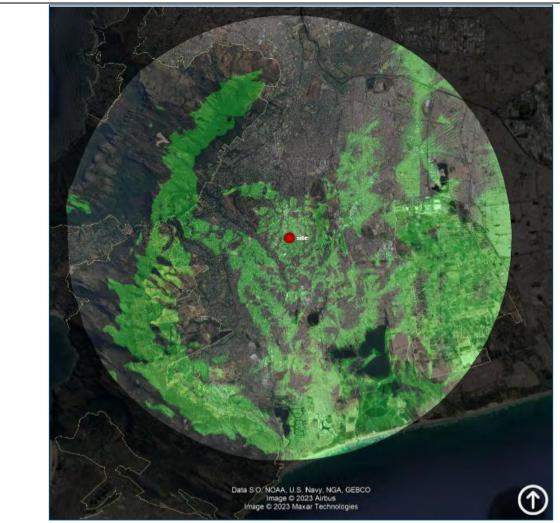


Figure 36. Digital view catchment area (10km radius) of the site (source: Gibbs, 2024)

foreg	foreground		middle distance		background		text
on site	adjacent	near	medium	long	distant	far	very far
Highly	Within	250m -	500m –	1km -	2km –	4km –	barely
visible	250m	500m	1km	2km	4km	5km	visible



Figure 37. Zones of visual influence (4km radius) of the site (Source: Gibbs, 2024)



Figure 38. Affected areas within 500m of the highest point of the rail-overpass (Source: Gibbs, 2024)

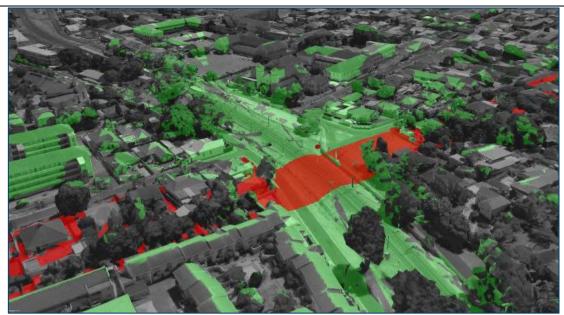


Figure 39. Viewshed areas with 250m of the site shown in perspective (Source: Gibbs, 2024)

#### Visual Sensitivity

Note: The below information has been summarised from (Gibbs, 2024)

The portion of the field-of-view dominated by the proposal diminishes significantly beyond 500 meters from the site, as foreground buildings increasingly screen the view. However, at higher elevations, more direct views of the proposal become possible again. Within the immediate vicinity of the site, the visual sensitivity is assessed as high due to the proximity of sensitive receptors and the prominence of the site in the surrounding visual landscape.

The receptors of the anticipated visual impact are primarily the existing urban cultural landscape areas, which possess high visual sensitivity. While the site is situated within an urban area, the scale of the proposed intervention appears to conflict with the residential scale of the surrounding fabric. This disparity in scale is likely to exacerbate the visual impact, especially in areas where the existing urban landscape has a more modest and consistent character.

As a function of landscape sensitivity and anticipated magnitude of change resulting from the proposed development, the sensitivity to visual change is of high Significance.

#### Visual Exposure

Note: The below information has been summarised from (Gibbs, 2024)

The development proposes to occupy land already transformed through urban use. However, due to the scale of the proposal, the development will be highly noticeable due to the transformation of the site. The proposal would have High Visual Intrusion.

Considering the existing vegetation and subtle landform, the Visual Absorption Capacity (VAC) of the site is Moderate, with partial screening afforded by existing buildings and vegetation.

As a function of receptor sensitivity and anticipated magnitude of change, the sensitivity to visual change is of High Significance: i.e., potential effect on protected landscapes or scenic resources with the area; with noticeable change in the visual character of the area; introducing new typology of development and adding to existing infrastructure within the area. Whereas mitigation through urban design and landscape architectural place-making measures has been proposed, the sheer scale of the proposal (an in particular the rail overpass bridge) is impossible to mitigate to any meaningful extent, as the foreground intrusion of this structure is likely to have a profoundly negative visual impact upon the urban cultural landscape.

# **Viewpoints**

Note: The below information has been summarised from (Gibbs, 2024)

The proposed development includes a rail overpass bridge that will be highly visible due to its elevation—6.2 meters above the railway line and 8.2 meters above the ground. The bridge will be noticeable along its entire length due to the existing road accessibility. Its scale and height will have a significant visual impact, making mitigation difficult, especially considering its intrusive presence in the urban cultural landscape.

# Landscape Character Analysis

Note: The below information has been summarised from (Gibbs, 2024)

The subject site, located in the southern suburbs of Cape Town, is part of an established urban cultural landscape with a residential character. Its flat, "sky-dominated" topography makes it visually exposed, with views towards the Cape Peninsula and Boland Mountains. The proximity of the Cape Peninsula mountains gives the area a sense of orientation and aspect, with the distant Boland Mountains terminating the eastern edge of the viewshed.

The northern and southern edges of the site interfaces directly with residential neighbourhood properties. The visual and physical continuity of the urban streetscape is an important indicator, and the transition from what is currently open space (and residential/commercial properties) to transport infrastructure will constitute a fundamental change.

Apart from several mature trees in clusters, the site has very few topographical features of significance, however the adjacent streetscape provides visual amenity, as do the local neighbourhood landmarks (including schools, places of worship and corner stores) and provides architectural interest and visual amenity.

#### Visual Concerns

Note: The below information has been summarised from (Gibbs, 2024)

Former apartheid planning created discontinuity between communities, as seen in the interface between Wynberg/Wittebome and Plumstead along South Road. The "informal green space" served as a buffer between these neighbourhoods, along with the railway line, further isolating them from each other.

Contemporary planning, including the IRT network, aims to improve connectivity between areas. However, in this case, the proposed rail overpass bridge, designed for grade separation, paradoxically reinforces local separation between neighbourhoods. Present imagery highlights the mismatch in scale between such large-scale interventions and the finer-grain residential environments surrounding them.

The local landmark buildings, which currently stand out in the urban fabric, are likely to be overshadowed by the scale of the proposed infrastructure. The soft, green areas provided by open spaces and mature trees along the Plumstead edge of South Road will be lost and replaced with road infrastructure, diminishing the current natural buffer between the urban areas.

The closure of the numerous intersections of neighbourhood roads with South Road (apart from the Pluto Roud intersection) further exacerbates the north/south separation and severs the existing seams between the two neighbourhoods. This is likely to impact massively on traffic patterns, especially as the local schools and places of worship current serve residents on both sides of South Road. In the opinion of the EAP, the transport study is better placed to inform impacts on traffic patterns.

The demolition of several single-storey dwellings, including 'Mallow' at the Main Road interface and Abdullah's Food Store at the Ottery Road interface, further diminishes the character and quality of the urban fabric. This fabric currently maintains legibility as an established residential environment. The proposed infrastructure's scale appears inappropriate for the existing urban cultural landscape context and seems disrespectful to the local environment.

The proposed rail overpass bridge is likely to overshadow the properties to the south and dwarf them in scale, particularly at its highest point, which will rise 6.2 meters above the railway line. The railway line itself is already elevated at 1.9 meters above grade.

While the visual specialist reports that increased velocity, volume, and flow of traffic are expected to impede pedestrian movement in a north/south direction, and likely lead to higher levels of noise and air pollution, the EAPs believe that these impacts are more accurately addressed by the transport engineers and the respective specialists.

Visual concerns can be translated into visual indicators for design revision response. These indicators have been included in **Section I** below.

Views of the newly proposed infrastructure from key points were simulated by the specialist and are included in the Visual Impact Assessment.

# 11. Noise Aspects

6.1.	Was a specialist study conducted?	YES	OH				
6.2.	6.2. Provide the name and/or company who conducted the specialist study.						
A Noise	A Noise Impact Assessment was conducted by Soundscape Consulting. Reference to this assessment is hereafter referred to						

as (Soundscape, 2025) and is included in **Appendix G4.** 

6.3. Explain how areas that contain sensitive noise aspects have influenced the proposed development.

The specialist considered all legislated noise-related requirements in terms of NEM: AQA, the Western Cape Noise Control Regulations, SANS 10103, as well as the City of Cape Town's Public Nuisance By-law (2007).

A baseline noise survey was carried out, with measurements taken at two points (sites) along the route (Figure 40). The survey found the following:

- Noise levels were 1 to 3 dBA higher during AM and PM peak hours than at mid-day.
- Noise levels at Site 1 were higher than at Site 2 due to its proximity to the road edge and railway line.
- The daytime rating levels measured confirm the results of the current scenario, where a significant portion of receptors (63%) along the existing alignment already experience outdoor noise levels above 60 dBA, typical of urban areas

with main roads, business premises, or workshops, Similarly, 57% of receptors are estimated to experience nighttime levels above 50 dBA.



Figure 40. Baseline noise survey, measurement locations

The result of the noise survey is tabled below (Table 11) and shows the current noise sources in the area.

Table 11. Noise survey results (source: Soundscape, 2025)

Site	Description	Coordinates	Reference time	LAleq	Comments
Site	Exeter	34° 0'57.50"S	AM peak		Road traffic, mostly light vehicles, and rail traffic most
'	Road	18°28'15.40"E	Daytime	65.8	significantly affect noise at this location. Road traffic from Main Road, Waterbury Road, Exeter Road, and
			PM peak	66.3	Brampton Road affected measurements. Birds audible during times with no road traffic. Three train pass bys were captured during the AM peak hour measurement, and two during the AM peak hour.
Site	South	34° 0'52.80"S	AM peak	64.6	Road traffic most notable contributor to acoustic
2	Road	18°28'47.00"E	Daytime	63.1	climate followed by community noise i.e. pedestrians in conversation, loud music, children playing. Noisy
			PM peak	64.3	incidents included vehicle hooters and alarms. Birds were audible during gaps in traffic spells.
					Activities at Douglas Road Primary (school bell, kids) were audible during the daytime measurement.

"The CCT classification designates the desired rating level for this area as that of urban areas with main roads, business premises, and/or workshops: 60 dBA during the day and 50 dBA at night. However, measurements and simulation results indicate that current noise levels are already closer to those typical of central business districts: 65 dBA during the day and 55 dBA at night. In fact, the overall average of simulated day- and night-time rating levels at receptors along South Road is currently 64.5 and 54.5 dBA, respectively" (Soundscape, 2025).

Given this discrepancy, the noise impact assessment is conducted using two approaches:

- A conservative estimate, where the noise impact is calculated as the difference between the expected future rating levels and the desired rating levels for the general area (as per CCT guidelines).
- An alternative approach, assuming current noise levels as the baseline, and calculating the impact as the difference between the expected future levels and current levels.

This dual approach offered a more comprehensive understanding of the potential noise impacts, accounting for both regulatory standards and existing noise conditions.

**Expected noise levels resulting from the development:** 

#### Construction:

During infrastructure development, construction activities (which will include demolition, site clearing, ground excavation and earthworks, distribution and compaction of materials, concrete works, metal works, etc.) will be highly variable in intensity, location, duration, and time of day, even over a 24-hour cycle.

Expected noise levels 10 m from construction activities will likely range between 52 and 95 dBA depending on the specific activity, equipment involved, and duration.

#### **Operational phase:**

The specialist notes that three main factors to consider in the operational phase for traffic noise levels are traffic volume, vehicle speed, and proportion of trucks or heavy vehicles in the traffic flow. Generally, noise increases with heavier traffic, higher speeds, and more trucks (Soundscape, 2025). Noise is generated by vehicle engines, tire friction on the road surface, and aerodynamic drag, with intensity varying based on vehicle speed, type, and road conditions (Soundscape, 2025). This noise typically follows a diurnal pattern, peaking during morning and evening rush hours and diminishing late at night when traffic volumes are lower. Other factors, such as steep inclines, can also amplify traffic noise due to increased engine strain (Soundscape, 2025). To assess the operational phase impacts of the proposed project, four distinct scenarios were considered, as outlined in **Table 12**. These scenarios serve two main purposes: firstly, to establish current noise rating levels at receptors along Waterbury and South Road, based on the existing road alignment and the most recent traffic data from 2022. Secondly, they aim to demonstrate how various aspects of the proposed project, including road realignment, overpass construction, road widening, the introduction of a bus service, and projected traffic growth (for 2040), will alter the area's acoustic environment.

All scenarios, except PB2040, include noise associated with railway traffic between Wittebome and Plumstead stations, as it will be affected by the construction of the proposed project.

Scenario	Description
E2022	Existing road alignment with current road traffic volumes
P2022	Proposed road alignment with current traffic volumes
PB2040	Proposed road alignment with dedicated bus service traffic only
PT2040	Proposed road alignment with projected total traffic volumes for 2040, including dedicated bus service traffic

**Table 12. Impact Assessment Scenarios** 

**Table 13** displays daytime rating levels for each scenario, including (a) the overall maximum noise level at receptors, with specific attention to two educational facilities, and (b) the count of receptors exceeding predefined thresholds (50, 55, 60, 65, and 70 dBA). These thresholds reflect the categories typically found in various districts and land uses as defined in SANS 10103. **Table 14** includes the night-time rating levels and follows a similar structure, also covering all five scenarios, while omitting educational receptors which are unoccupied at night, and utilising lower thresholds (40, 45, 50, 55, and 60 dBA) to reflect increased sensitivity to nighttime noise.

Table	13. Expected	daytime rating	levels at receptors
-------	--------------	----------------	---------------------

Scenario	E2022 Existing, 2022 traffic	P2022 Proposed, 2022 traffic	P2040 Proposed, 2040 traffic	PB2040 Proposed, MyCiti Bus only	PT2040 Proposed, 2040 total traffic					
		Expected outdoor daytime rating levels (dBA)								
Maximum	72.8	71.6	72.2	65.9	72.4					
Wynberg Crèche	63.8	65.5	71.0	60.9	71.4					
Douglas Rd Primary	63.6	60.1	66.0	60.1	67.0					
		Number o	of receptors exceed	ding rating levels						
No of receptors assessed	136	103	103	103	103					
> 50 dBA	136 (100%)	103 (100%)	103 (100%)	93 (90%)	103 (100%)					
> 55 dBA	126 (93%)	82 (80%)	101 (98%)	71 (69%)	103 (100%)					
> 60 dBA	86 (63%)	57 (55%)	82 (80%)	41 (40%)	85 (83%)					
> 65 dBA	43 (32%)	16 (16%)	64 (62%)	1 (1%)	67 (65%)					
> 70 dBA	3 (2%)	2 (2%)	12 (12%)	0 (0%)	16 (16%)					

Table 14. Expected night-time rating levels at receptors

Scenario	E2022 Existing, 2022 traffic	P2022 Proposed, 2022 traffic	P2040 Proposed, 2040 traffic	PB2040 Proposed, MyCiti Bus only	PT2040 Proposed, 2040 total traffic	
	Expected outdoor daytime rating levels (dBA)					
Maximum	61.9	60.8	61.4	54.9	61.5	
	Number of receptors exceeding rating levels					
No of receptors assessed	136	103	103	103	103	
> 40 dBA	136 (100%)	101 (98%)	103 (100%)	90 (87%)	103 (100%)	
> 45 dBA	125 (92%)	81 (79%)	98 (95%)	67 (65%)	102 (99%)	
> 50 dBA	77 (57%)	45 (44%)	77 (75%)	24 (23%)	82 (80%)	
> 55 dBA	35 (26%)	13 (13%)	55 (53%)	0 (0%)	62 (60%)	
> 60 dBA	2 (1%)	1 (1%)	7 (7%)	0 (0%)	11 (11%)	

To ensure a comprehensive assessment of all potential noise impacts associated with the project, the specialist considered these additional scenarios:

- The rail overpass with and without an acrylic acoustic/visual barrier (in addition to the 1.5 m concrete parapet (safety barrier).
- Transition to electric and hybrid vehicles: The CCT has proposed that 60% to 80% of their fleet operating on this route will be electric vehicles in the future.
- Ultimate road scheme: The Conceptual Design Review Report (HHO Consulting Engineers, 2023) outlines an ultimate road scheme that allows for future expansion. The proposed horizontal geometry is designed to accommodate an additional general traffic lane on each side of the road.
- Alternative rail crossing: While the current preferred option is an overpass, the construction of a rail underpass was also evaluated as an alternative.

The omission of the acoustic/visual barrier will increase noise levels at twelve residential buildings located at either end of the rail overpass, near the ramps. The difference in noise levels with and without the barrier ranges from 0.1 to 2.4 dBA, with the maximum increase of 2.4 dBA observed at the northernmost residential building on Erf 153600 (Plumberry Square, located on Hemyock Road).

Without the acoustic barrier, the overall noise impact at this location (considering the projected increase in total traffic volume in 2024 compared to current levels) will rise from 16.7 dBA to 19.1 dBA. To provide context, a 1 dB increase is barely perceptible, a 3 dB increase is just noticeable under controlled conditions, a 5 dB increase is clearly noticeable, and a 10 dB increase is perceived as twice as loud. The analysis therefore suggests that omitting the acoustic barrier will not significantly alter the overall noise impact. The 1.5-meter-high concrete parapet along the edges of the rail overpass, which is both highly reflective and somewhat absorptive, effectively reduces road traffic noise along the overpass. Therefore, the addition of the acrylic acoustic barrier atop the parapet does not offer a substantial improvement in noise reduction.

Based on studies relating to noise and the transition to electric and/or hybrid vehicle fleet and consideration of speed and other considerations along the proposed development, the specialist concluded that the overall noise reduction in average day and night-time rating levels along the route will be limited with the transition to electric buses on this route.

The horizontal alignment considers an ultimate road scheme where the proposed horizontal geometry can be altered to accommodate an additional general traffic lane on either side of the road. This is achieved by reducing the 3 m northern NMT corridor to 1.8 m and utilising the 1.5 m shoulders on both sides. The result is the addition of a 3.7 m lane in either direction. The southern sidewalk would be offset into the remaining space within the road reserve.

The ultimate road scheme, which includes additional general traffic lanes, will reduce the buffer between receptors and the outermost lanes, potentially amplifying noise impacts. Furthermore, the rationale for the widening is presumably to accommodate increased traffic volumes. This growth in traffic would likely result in noise impacts more severe than those estimated in the current assessment.

With regard to the underpass alternative, Soundscape (2025) concluded that on balance, the underpass would result in noise impacts comparable to those associated with the overpass with sound barriers.

# 12. Traffic Aspects

A traffic investigation was undertaken by HHO Consulting Engineers which included an in-depth analysis of the existing traffic operations and the future planned network. Please refer to **Appendix G9** for the traffic study.

#### **Existing Traffic Conditions**

The following traffic observations were made at the study area (HHO, 2024)):

- There are relatively low traffic volumes from the side roads along South Road, as expected from Local Streets. The highest traffic volumes observed were approximately 250 veh/h and 300 veh/h during the AM and PM peak hours respectively. This excludes the traffic volumes from Ottery Road (Class 4) which are significantly higher (approximately 650 veh/h and 750 veh/h in the AM and PM peak hours respectively).
- There are relatively low traffic volumes along South Road. The highest traffic flows observed are approximately 420 veh/h and 300 veh/h during the AM and PM peak hours respectively.
- In the AM peak period it was observed that traffic from the M5 utilizes South Road as an alternative route to the Rockley Road underpass which links to the M4. Traffic branches off at Sussex Road, Batts Road and Castletown Road to bypass the traffic queue to Rockley Road from Ottery Road.
- Relatively high westbound right turn traffic volumes were observed at the South Road / Batts Road / Chudleigh Road intersection in the AM peak hour. These vehicles could be heading to the primary school along Batts Road (Muhammadeyah Primary School) or alternatively to the Rockley Road underpass.
- There are several local streets along South Road making South Road conveniently accessible from all areas for the community.
- The northern region (north of South Road) is a mixed land use area including residential properties, commercial properties, schools, museums and churches.
- The southern region (south of South Road) is predominantly residential properties.

# **Existing Network Performance**

The existing AM and PM peak hour traffic flows were analysed to determine the existing peak hour intersection operations. Currently the intersection of South Road / Kent Road / Pluto Road is a major north to south link in the existing road network (HHO, 2024). The capacity analysis of the intersection during the AM and PM peak hours is summarised in **Table 15**. The traffic flows were analysed using Sidra intersection 9 (HHO, 2024).

Table 15. Existing Capacity Analysis at South Road / Kent Road / Pluto Road intersection (HHO, 2023)

		Capacity Analysis					
Intersection Name	Approach	AM Peak Hour			PM Peak Hour		
		v/c	Delay (sec/veh)	LOS	v/c	Delay (sec/veh)	LOS
South Rd / Kent Rd / Pluto Rd	South: Pluto Road	0.39	50.1	F	0.17	23.7	С
	East: South Road	0.49	14.1	В	0.33	12.7	В
	North: Kent Road	0.27	24.4	С	0.32	30.2	D
	West: South Road	0.28	13.3	В	0.24	12.4	В
	Overall		17.4	С		15.7	С

# Notes

 Near Capacity
 0.85
 0.95

 At Capacity
 0.95
 0.95

 Over Capacity
 0.95
 0.95



From the table this 4 - way stop controlled intersection operates at under capacity conditions during the AM (v/c=0.49) and PM (v/c=0.33) peak hours. The south approach (Pluto Road) has high delays during the AM peak hour (>50 sec/veh). Overall, the intersection operates at an acceptable level of service (LOS C) in the AM and PM peak hours (HHO, 2024).

Within the traffic investigation the following scenarios and indicators were analysed (HHO, 2024):

- EMME Metropolitan Transport Model was used to analyse future traffic flows. Future traffic flows were modelled for
  the 2040 AM peak hour. The redistributed traffic volumes were then increased by a growth factor of 15% to
  represent the 2040 future traffic conditions. The increase was based on the outputs generated from the EMME
  model within the study area.
- The traffic impact of closing 12 local streets on proposed accesses along South Road was assessed by analysing AM and PM peak-hour operations at key intersections and redistributing traffic based on origin-destination patterns using available access points and links (Figure 42).
- Future traffic flows along the South Road trunk route were adjusted to reflect changes in proposed intersections and access configurations. This was done using the EMME model to obtain AM and PM peak-hour traffic flows at key

- intersections, redistributing traffic where necessary, and combining these flows with existing data to determine the total future traffic volumes
- The performance of the future traffic operations at the proposed signalised intersections along South Road were then analysed for the AM and PM peak hours (2040). The intersection capacity analysis was conducted using Sidra Intersection 9
- An intersection capacity analysis was undertaken for South Road / Main Road intersection.
- A capacity analysis was undertaken for the Ottery Road / South Road / Rosmead Avenue / Prince George Drive and Rosmead Avenue / Ottery Road network.
- A capacity analysis was undertaken of the exclusive bus lanes.
- The queue lengths between the closely spaced intersections was undertaken.
- A microsimulation of traffic operations between two closely spaced intersections was undertaken. The 2040 AM and PM peak-hour traffic at the Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection and the Ottery Road / Rosmead Avenue intersection was analysed, using phasing and timing from the SIDRA capacity analysis, which was further optimized for the simulation.
- The microsimulation was extended to analyse traffic operations along the entire proposed South Road link (from Main Road to Rosmead Avenue/Prince George Drive) and Ottery Road between the M5 and Torrens Road, as part of Work Package W5 (Ottery Road).

#### **Traffic Investigation Findings**

The proposed links and intersections along the proposed South Road link will comprise the following (Error! Reference source not found.):

- South Road / Main Road intersection
- Brampton Road as a grade separation link between the greas north and south of South Road
- South Road / Chudleigh Road intersection
- South Road / Kent Road intersection
- South Road / Milford Road intersection
- Ottery Road / Rosmead Avenue intersection
- Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection.

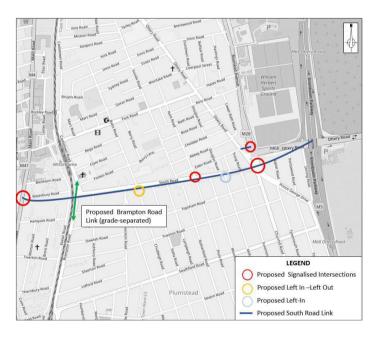


Figure 41. Proposed Intersections (source: HHO, 2025)

# South Road / Main Road Intersection

Note: The following information was summarised from (HHO, 2024).

There is a relatively high northbound right turn volume (±440 veh/hr in the AM peak hour and ±390 veh/hr in the PM peak hour) operating from an exclusive right turn lane and a shared through and right turn lane. However, this high right turn volume is accommodated through the provision of a start-up phase. As a result, the south approach will operate at under capacity conditions (v/c=0.85 in the AM peak hour and v/c=0.83 in the PM peak hour) with reasonable delays (± 31 s/veh) in the AM and PM peak hours. The South Road (east) approach will operate at over capacity conditions (v/c=1.15) with high There is a relatively high southbound left turn volume (±530 veh/hr during the AM peak hour and ±800 veh/hr during the PM peak hour) operating from a shared through and left turn lane. As a result, the north approach will also operate at over capacity conditions

(v/c=1.14 during the AM peak hour and v/c=1.12 during the PM peak hour) with very high delays (>80 s/veh) in the AM and PM peak hours.

#### South Road / Kent Road Intersection

Note: The following information was summarised from (HHO, 2024).

The South Road (east approach) will operate at capacity (v/c=0.97) during the AM peak hour, and at under capacity conditions (v/c=0.82) during the PM peak hour. The approach will have acceptable delays (46 s/veh) during the AM peak hour and low delays (<20 s/veh) during the PM peak hour. The Kent Road approach will operate at under capacity conditions (v/c=0.64 and v/c=0.63) during the AM and PM peak hours respectively. However the approach will have relatively high delays (±55 s/veh) during the AM and PM peak hours. The South Road (west approach) will operate at under capacity conditions (v/c=0.82) during the AM peak hour, and at near capacity conditions (v/c=0.93) during the PM peak hour. The approach will have low delays (18.5 s/veh) during the AM peak hour and acceptable delays (> 35 s/veh) during the PM peak hour. The dedicated trunk service bus lane approaches (eastbound and westbound) along South Road will operate at a high level of service (LOS A / B), indicating low delays, in the AM and PM peak hours. Overall, the South Road / Kent Road Intersection intersection will operate at an acceptable level of service (LOS C) during the PM peak hour

# Ottery Road / South Road / Rosmead Avenue / Prince George Drive Intersection

Note: The following information was summarised from (HHO, 2024).

The Prince George Drive (south east) approach will operate at under capacity conditions (v/c 0.60) with relatively high delays ( $\pm$ 55 s/veh) during the AM and PM peak hours. During the AM peak hour, there is a high westbound right turn volume (970 veh/hr) operating from a double exclusive right lane. As a result, the Ottery Road (north east) approach will operate at capacity conditions (v/c=1.03) with relatively high delays (79 s/veh). During the PM peak hour, the approach will operate at under capacity conditions (v/c=0.77) with reasonable delays (30 s/veh).

The Rosmead Avenue (north) approach will operate at under capacity conditions (v/c < 0.7) with relatively low delays ( $\pm 14$  s/veh) in the AM and PM peak hours. The South Road (south west) approach will operate at near capacity conditions (v/c = 0.91) with acceptable delays in the AM peak hour. In the PM peak hour, the intersection will operate at under capacity conditions (v/c = 0.80), with reasonable delays (33 s/veh).

Overall, the intersection will operate at a low level of service (LOS E), indicating high delays, during the AM peak hour and at a reasonable level of service (LOS C) during the PM peak hour.

# Ottery Road / Rosmead Avenue Intersection

Note: The following information was summarised from (HHO, 2024).

All the approaches of the intersection will operate at under capacity conditions (v/c < 0.85) during the AM and PM peak hours. The worst approach, west approach, will operate at an acceptable level of service (LOS D) during the AM peak hour. Overall, the intersection will operate at a high level of service (LOS B), indicating low delays, during the AM and PM peak hours.

## Queue Space

Note: The following information was summarised from (HHO, 2024).

Queues developing between the two closely spaced intersections can be accommodated within the available storage length (approximately 60m). Therefore, the queues should not negatively impact the operation of the two closely spaced intersections and specifically not on the Ottery Road / South Road / Rosmead Avenue / Prince George Drive Intersection and the exclusive BRT lane. The microsimulation undertaken indicated that queues between the two intersections would not negatively impact traffic operations, as the linked phasing ensures efficient queue clearance.

#### <u>Simulation observations</u>

The following was observed from the microsimulation:

- The dedicated bus lanes and the signal phasing ensure that there are minimal delays for the MyCiti public transport service.
- General traffic congestion can be expected along the entire South Road extent including Main Road and the M5 Freeway.
- Long queues can be observed along South Road at the South Road / Kent Road intersection. This is due to the reduction in capacity (single lane at the stop line) as a result of the introduction of an exclusive use NMT lanes.

#### Parking

Note: The following information was summarised from (HHO, 2024).

There is no existing formal parking along South Road. Formal parking in the form of embayment's is provided to the east of South Road, along Ottery Road, Rosmead Avenue and Prince George Drive. Informal parking is observed in three areas: off-street parking along the southern edge of South Road, off-street parking (Wynberg Used Cars) along the southern edge of Ottery Road (M68) between Prince George Drive and Portswood Road, and on-street parking along Main Road.

Some parking areas south of South Road will be formalized as part of the design (refer to Appendix B).

# **Future Traffic Operations**

Note: The following information was summarised from (HHO, 2024).

The planned link is illustrated as a Class 2 Major Arterial Road. The planned alignment will include the reconfiguration of the existing Ottery Road / Rosmead Avenue / Prince George Drive intersection and grade separation at the existing rail line.

#### **Summary of Findings**

The main findings from the traffic study are summarised as follows (HHO, 2024):

- The slip lane at the eastern approach of the Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection was replaced with an exclusive left-turn lane.
- The Pluto Road (southern) leg of the South Road / Kent Road / Pluto Road intersection was closed.
- Access opportunities proposed for the southern region include a left-in left-out access at the South Road intersection
  with Chudleigh Road and a left-in access at the South Road intersection with Milford Road.
- The flows previously redistributed to Pluto Road have been redistributed to the available access opportunities.
- Several lane configurations and median island widths were amended.
- The proposed sidewalks and pedestrian crossings were amended as per CCT NMT standards.
- Continuous Class 2 cycle lanes are proposed along South Road between Main Road and Rosmead Avenue / Prince George Drive.

# Capacity Analysis Results

Note: The following information was summarised from (HHO, 2024).

- The future (2040), South Road / Main Road intersection will operate at a low level of service (LOSE), indicating low delays, in the weekday AM and PM peak hours.
- In the future (2040), the dedicated bus lane approaches at South Road / Main Road intersection will operate at an acceptable level of service (LOS D) in the AM and PM peak hours.
- The future (2040), South Road / Kent Road intersection will operate at an acceptable level of service (LOS D) during the AM peak hour and at reasonable level of service (LOS C) in the PM peak hour.
- In the future (2040), the dedicated trunk service bus lane approaches at the South Road / Kent Road intersection will operate at a high level of service (LOS A/B), indicating very low delays, in the AM and PM peak hours.
- The future (2040) Rosmead Avenue / Ottery Road intersection will operate at a high level of service (LOS B), indicating low delays, in the AM and PM peak hours.
- In the future (2040), Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection will operate at a low level of service (LOS E) in the AM peak hour and at an acceptable level of service (LOS C) in the PM peak hour.
- In the future (2040), the dedicated BRT lane approaches at the Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection will operate at a reasonable level of service (LOS C) in the AM and PM peak hours.
- In the future (2040), the short queue jump southbound left turn bus lane will operate at a reasonable level of service (LOS C) in the AM peak hour and at an acceptable level of service LOS D in the PM peak hour.
- The queue lengths between the two closely spaced intersections i.e., north approach of the South Road / Rosmead Avenue / Prince George Drive intersection and south approach of the Rosmead Avenue / Ottery Road intersection, will not exceed the 60m storage length in the (2040) AM and PM peak hours.

# Access Management

Note: The following information was summarised from (HHO, 2024).

The proposed South Road / Chudleigh Road LILO access meets the minimum access spacing requirements.

# **Parking**

Note: The following information was summarised from (HHO, 2024).

There is currently no formal parking provided along South Road. However additional parking areas is proposed as part of the Work Package W8 design.

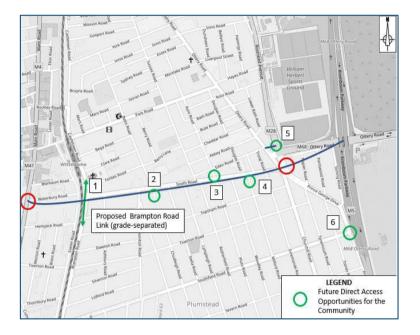


Figure 42. Future Access Opportunities (source: HHO, 2025)

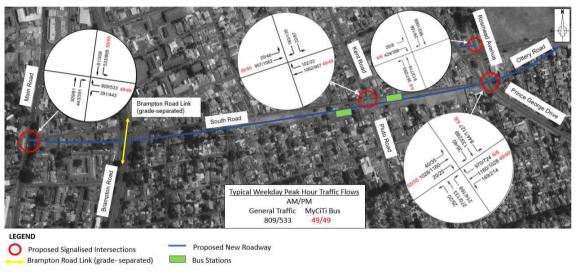


Figure 43. Total Future Traffic Flows (Source: HHO, 2025)

# SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

# 1. Details of the alternatives identified and considered

1.1. Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred property and site alternative.

The City of Cape Town intends to develop a network of routes in which public transport bus services can operate. This is referred to as the Metro South East Corridor (MSEC) (formerly known as the Integrated Rapid Transport (IRT) Phase 2A).

This application is limited to Work Package W8 of the larger MSEC project, which would connect Wynberg Main Road in the west to Ottery Road in the east, via South Road (**Figure 1**).

The proposed scope includes the following:

- The existing section of South Road would be extended westwards by ±265m in order to connect to Wynberg Main Road via a newly constructed bridge over the railway line and Waterbury Road.
- The intersection between Prince George Drive, Rosmead Avenue, Ottery Road and South Road would be re-aligned and upgraded/widened.
- Sections of Wynberg Main Road, Prince George Drive, Ottery Road, Rosmead Avenue and Pluto Road will also be upgraded / widened.
- The inclusion of two dedicated bus lanes and additional vehicular use lanes along the entire route.
- New bus station located at the Pluto Road intersection;;
- Provision of improved non-motorised transport (NMT) routes;
- Development of a bridge to cross the railway line;
- A road shoulder;
- Parking areas;
- Hard and soft landscaping using indigenous plant species and retaining, where possible, existing trees.
- Service infrastructure:
  - Stormwater interventions on site will cater for the minor (1:5 year) and major (1:10 year) storm recurrence return periods and will entail a network of concrete collector pipes, new catchpits, and the relocation of existing catchpits and manholes, all of which will integrate with the existing stormwater infrastructure.
  - The existing street lighting along the proposed roadway will be removed and replaced with new infrastructure
  - A range of overhead and underground services (electrical, water, sewage, stormwater, telecommunication) are present within the site boundary. Accordingly, appropriate provisions must be made for the removal, relocation, upgrade (where necessary) or protection of existing infrastructure, including electrical, telecommunication, water, and sewer services. These will however all be within the development footprint being applied for or within existing road reserves.

None of the proposed service infrastructure (pipelines, transmission lines etc.) meet the thresholds considered in the respective Listed Activities.

The typical cross section for the route will comprise a 3.5m bus lane, 3.4m general traffic lane and 1.5m shoulder on either side. The NMT is made up of a 2m wide sidewalk and 1.8m wide dedicated cycle lane on both sides. The route and road extent are depicted in **Figure 1** below. Site Plans are included in **Appendix B1** and **Appendix N** for the draft Landscaping Plan.

The proposal will necessitate:

- Acquisition of approximately 22 privately owned properties along the route;
- Demolition of a number of existing structures (Figure 2 and Figure 3);
- The permanent or partial closure of certain roads / intersections for vehicles (Table 1).

# **Encroachment into Public Open Spaces**

Approximately thirty-five Public Open Spaces (OS2) would be encroached upon by proposed road widening and associated activities. These areas have a split zoning of OS2 and Transport 2 as they have long been earmarked for this road upgrade. The affected properties will be encroached upon by > 4m, as shown in **Table 3** above.

Provide a description of any other property and site alternatives investigated.

Not Applicable, as no alternative sites have been considered.

Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.

The City of Cape Town transport systems planning team have identified key access routes throughout the metro (refer to **Figure 6** Error! Reference source not found.) and this proposed development comprises a small stretch of that route. Ottery Road, South Road and Waterbury Road already exist as part of the local transport network.

The Lansdowne-Wetton Corridor (LWC) road scheme was originally approved by Council in October 2011 as part of the broader planning and design approval for IRT Phase 2. A route alignment options analysis for the Wynberg leg of the LWC trunk route was completed in 2014, and its findings were incorporated into the approved 2032 IPTN plan in June 2014. This alignment was recommended based on its ability to meet IRT needs while addressing road network deficiencies and minimizing property acquisitions compared to the Wetton Road alternative.

From a strategic road network perspective, the proposed development is essential for establishing a critical east-west connection in the southern Wynberg area and across the railway line, ensuring continuity with the proclaimed South/Constantia Road link west of Main Road. This road link is required independently of the IRT trunk alignment.

Given that preceding studies have thoroughly considered route alternatives, and already determined the most appropriate route, no further route alternatives were assessed as part of this Basic Assessment process.

# Note on Alternative Route Options

Prior to the current design process and this Basic Assessment, investigations were conducted into alternative route options for the proposed development. This included a full alternative analysis, including, a high-level concept design, service designs, and an on-site survey to understand pedestrian traffic along Main Road in Wynberg. The study was subject to a peer review. Two alternative trunk route alignments were considered: the Ottery Road alignment, which follows Strandfontein Road, Ottery Road, South Road, and the Wynberg Brodie/Main Road couplet to the Wynberg PTI (discussed within this report), and the Wetton Road alignment, which follows Wetton Road to the Wynberg PTI.

A design was undertaken on the Wetton Road alignment to provide a cost comparison with the proposed South Road option. The design indicated that approximately 122 properties would be affected, with a total capital cost for infrastructure (including BRT trunk infrastructure) amounting to R949 million. This did not account for the implementation of strategic road network links in the Wynberg area, such as the South Road link and Brodie Road couplet.

The capital costs for the road network extensions, including the South Road link and the Main Road/Brodie couplet, amounted to R678 million. In comparison, the capital cost for BRT-only infrastructure was R110 million for the Ottery Road alignment (the Preferred alignment) and R949 million for the Wetton Road alignment. The Wetton Road alignment is 3.5km shorter in route length, indicating reduced operational costs

When comparing combined capital, operating, and maintenance costs over a 40-year design life, the following results were found:

- The Ottery alignment for BRT-only infrastructure is R629 million cheaper than the Wetton alignment.
- The total costs for road network and IRT infrastructure over 40 years show the Ottery alignment is R629 million cheaper than the Wetton alignment.
- A financial sensitivity test revealed that when the South Road link and Wynberg couplet are excluded, Wetton is slightly
  cheaper by R49 million. However, this option does not fully address the general traffic congestion in Wynberg, and
  these links will still need to be built in the future.
- The South Road link is crucial for providing an east-west link in the southern part of Wynberg, offering continuity with the South/Constantia Road link. A congestion strategy corroborated this link as an important road network upgrade, regardless of the BRT trunk alignment.

While the Wetton Road alignment is shorter in distance and travel time, the Ottery Road alignment is preferred due to its lower capital cost, its broader impact on the Greater Wynberg area, and the reduced risks associated with land acquisition and legal issues. Additionally, a net present value estimation over the infrastructure's design life shows that the operating disadvantages of the Ottery alignment are significantly outweighed by the capital savings.

If the Wetton Road alignment were chosen, additional funding would be needed to cover the higher costs, while still implementing the necessary South Road link and Brodie Road couplet. Furthermore, the Wetton Road option carries risks related to land acquisition and impacts on adjacent areas, such as access to commercial businesses, as well as public participation.

Please refer to **Appendix P** to view The Approval of The Trunk Route Alignment for The Portion of Route T11, From Strandfontein Road To Wynberg.

Provide a full description of the process followed to reach the preferred alternative within the site.

The City of Cape Town transport systems planning team have identified key access routes throughout the metro (refer to **Figure 6**) and this proposed development comprises a small stretch of that route. Ottery Road, South Road and Waterbury Road already exists as part of the local transport network.

The Lansdowne-Wetton Corridor (LWC) road scheme was originally approved by Council in October 2011 as part of the broader planning and design approval for IRT Phase 2. A route alignment options analysis which included a peer review was undertaken for the Wynberg leg of the LWC trunk route was completed in 2014, and its findings were incorporated into the approved 2032 IPTN plan in June 2014. This alignment was recommended based on its ability to meet IRT needs while addressing road network deficiencies and minimizing property acquisitions compared to the Wetton Road alternative.

Provide a detailed motivation if no property and site alternatives were considered.

The proposed development is part of a broader Integrated Rapid Transit (IRT) system being implemented by the City of Cape Town across the city. The route was selected by the City of Cape Town based on extensive studies that considered factors such as existing infrastructure availability and accessibility to maximize benefits for the community and minimise property acquisitions.

List the positive and negative impacts that the property and site alternatives will have on the environment.

The positive and negative impacts of the proposal for both the preferred Alternative and No-Go Alternative have been assessed in detail in the impact tables in **Section H4**. To avoid unnecessary repetition, it is not repeated here.

1.2. Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred activity alternative.

The preferred and only activity involves the implementation of the MyCiTi network along the designated stretch of Ottery Road, South Road and Waterbury Road through road upgrades, widening, and the construction of an overpass bridge. Although the MyCiTi Network will extend beyond this particular segment addressed in the Basic Assessment process, the necessity for this assessment is driven by environmental triggers under the National Environmental Management Act (NEMA) specifically applicable to this section of the route.

Provide a description of any other activity alternatives investigated.

No alternative activities have been considered.

Provide a motivation for the preferred activity alternative.

The Applicant is mandated to provide transport networks for the City of Cape Town and would not propose developments beyond this scope. The Applicant wishes to develop to IRT networks throughout the City of Cape Town and, therefore, no activity alternatives were (or could have been) considered.

Provide a detailed motivation if no activity alternatives exist.

The Applicant is mandated to provide transport networks for the City of Cape Town and does not propose developments beyond this scope. Specifically, the Applicant intends to develop the IRT Phase 2A network across Cape Town, with this project serving as the link to Wynberg Main Road. As such, no alternative activities will meet this intended purpose.

List the positive and negative impacts that the activity alternatives will have on the environment.

Not Applicable.

1.3. Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts

Provide a description of the preferred design or layout alternative.

There is only one layout which is based on the route analysis (as previously mentioned) as well as the optimal road design in accordance with engineering standards. Application is made for the development footprint, while the specific design within that footprint would be determined at detail design phase.

This assessment considered two design alternatives. The preferred design alternative (Alternative 1) includes the construction and development of a rail overpass (bridge) that links South Road to Waterbury Road. The proposed vertical alignment ascends, shortly after the Main Road intersection at roughly 4.7% to form a crossing over the existing railway line. Thereafter it descends at roughly 6.4%. The vertical design at this section was limited to a design speed of 60km/h to reduce the span of the bridge as well as to tie back to ground levels at a suitable location.

The preferred road layout is included in **Appendix B1**.

Provide a description of any other design or layout alternatives investigated.

As an alternative, the other design (Alternative 2) proposes the construction of an underpass beneath the Southern Railway line, linking South Road on the east of the existing railway with Waterbury Road on the west. The underpass will entail a jacked structure beneath the railway line with extensive retaining walls (lateral support) to facilitate the underpass within the available road reserve corridor on either side.

The preliminary geotechnical investigation found that the shallow, perched groundwater table at the site presented significant constraints to the proposed development (HHO Consulting Engineers, 2024). These included:

- Continuous ingress of perched groundwater and associated slumping of the saturated sands for excavation
  exceeding about 1.5m depth, undermining any battered sidewalls above and requiring groundwater lowering or
  temporary lateral support including groundwater control/drainage through dewatering;
- The need for piled foundations for heavier structures and/or structures with limited tolerance for settlement;
- De-watering of large volumes of groundwater for laterally supported excavations, particularly on the western side of the railway line, which could also impact neighbouring properties; and
- Potential for chemical attack and/or corrosion of concrete due to the moderately to highly aggressive groundwater conditions. Managing the groundwater would necessitate a robust subsoil system with continuous pumping, making it highly complex and costly to maintain (HHO Consulting Engineers, 2024).

As a result, the design and continuous maintenance requirements for Alternative 2 (underpass) rendered it technically and financially unfeasible, and hence, not preferred.

Provide a motivation for the preferred design or layout alternative.

The motivation for selecting the overpass design over the underpass design is based on several key environmental, technical, and safety considerations that align with the objectives of minimizing impacts on the surrounding environment and ensuring the long-term viability of the infrastructure.

The preferred alternative maximises on design potential. Provision of the largest cross-section possible enables the delivery of the best possible product and service to the community in the form of a useful and valuable network for public transport. The road needs to accommodate normal vehicular traffic as well as the IRT buses such that traffic flow remains smooth and that those buses, ideally, have their own lanes. This can be achieved with Alternative 1. From a biophysical perspective, there are no sensitive areas along the surface of the route which would have to be avoided which further supports the preferred layout alternative.

It is acknowledged that, for those in the vicinity of the railway crossing, Alternative 2 (underpass) may be more visually acceptable if compared to the preferred Alternative 1. However, the overpass structure offers substantial benefits in terms of minimizing continual groundwater and soil disruption. During geotechnical investigations, it was determined that the location has a relatively shallow water table, which would require a robust and costly subsoil system for managing groundwater if an underpass were to be considered. Continuous groundwater pumping would be required to keep the underpass dry, which would be both operationally demanding and expensive to maintain over time. In contrast, the overpass avoids this groundwater management issues, offering a more sustainable, cost-effective and viable solution in the long term.

Furthermore, the continuous operation of a pump generator to manage groundwater presents significant environmental and security challenges. Continuous operation of a pump generator would lead to ongoing emissions, primarily carbon dioxide (CO2), if powered by fossil fuels. This contributes to climate change by increasing the carbon footprint of the project. The constant running of generators also places a strain on energy resources. As efforts are being made worldwide to reduce emissions and shift towards more sustainable practices, the reliance on such energy-intensive methods becomes increasingly counterproductive in terms of environmental goals.

Homeless individuals may seek shelter in an underpass, particularly in areas where the environment is more sheltered and protected from the elements. While this may offer temporary relief to the individuals, it creates security concerns for the surrounding community. The presence of vagrants in the area could lead to risks such as theft, vandalism, or even accidents, especially if the underpass is not properly monitored.

Addressing these challenges requires a balance between social and environmental responsibility, energy efficiency, and ensuring the security of infrastructure in a way that is both sustainable and safe for all parties involved.

Overall, the overpass option provides a more practical, cost-effective, environmentally friendly and safer solution, aligning with sustainable development principles and minimizing the need for extensive maintenance and management measures.

Provide a detailed motivation if no design or layout alternatives exist.

Not applicable.

List the positive and negative impacts that the design alternatives will have on the environment.

The positive and negative impacts associated with design Alternatives 1 and 2 are detailed in Section H of this report. In the interest of brevity, it is not repeated here.

1.4. Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred technology alternative:

Industry standard technologies applicable to roadways, bridge construction, surfacing, and landscaping will be implemented. These are not considered alternatives in terms of this application.

Provide a description of any other technology alternatives investigated.

No technology alternatives have been considered.

Provide a motivation for the preferred technology alternative.

Given the nature of the project, which includes provision for bus lanes, a bridge overpass, facilities for non-motorized transport (NMT), and landscaping, there is limited opportunity to implement alternative technologies beyond those required for buses to operate safely alongside pedestrians and cyclists.

Provide a detailed motivation if no alternatives exist.

Various technologies, design principles, and infrastructure choices were assessed to ensure the incorporation of modern and advanced design and infrastructure in the development. These considerations are integral to the proposed plan and were not evaluated as separate alternatives. It is subject to refinement during the detailed design phase of the project.

List the positive and negative impacts that the technology alternatives will have on the environment.

All impacts assessed within this report are included in Section H. No technology-related impacts are applicable.

1.5. Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred operational alternative.

Operational aspects are limited to regular road maintenance to ensure optimal and safe use of the facilities by regular vehicle traffic, the MyCiTi public transport system, non-motorized transport users and pedestrians.

Provide a description of any other operational alternatives investigated.

Not Applicable. No operational alternatives have been assessed within this report.

Provide a motivation for the preferred operational alternative.

Not Applicable. No operational alternatives have been assessed within this report.

Provide a detailed motivation if no alternatives exist.

Provision of transport infrastructure of this nature is such that it does not offer meaningful operational alternatives.

List the positive and negative impacts that the operational alternatives will have on the environment.

Impacts associated with the operational phase of the proposal are included in Section H of this BAR, and hence, is not repeated here.

1.6. The option of not implementing the activity (the 'No-Go' Option).

Provide an explanation as to why the 'No-Go' Option is not preferred.

The no-go alternative entails maintaining the current state of relevant sections of the route (Ottery Road, South Road, Waterbury Road, and Main Road), without implementing the IRT network or constructing an overpass bridge. This means these areas would remain unchanged from their existing condition.

This alternative is deemed not preferred as the proposed development plays a pivotal role within the larger planned IRT Phase 2A system, which is integral to spatial planning of the greater area and enhancing public transport connections across the metropole, linking the eastern and western parts of the City. Without the proposed development, this strategic plan would be severely compromised, affecting accessibility, socio-economic opportunities for local communities, and the City of Cape Town's strategic objectives for connectivity as outlined in the MSDF.

1.7. Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.

No other alternatives were considered.

Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity. The preferred alternative proposes transport infrastructure to connect Wynberg Main Road in the west to Ottery Road in the east via South Road. It will include several road and intersection upgrades as well as a new bridge over the railway line to accommodate vehicular, IRT and NMT traffic. This will necessitate acquisition of some private properties, demolition of several structures as well as the moving, upgrading or protecting of service infrastructure.

Route alternatives were thoroughly considered in a preceding route analysis process. Therefore, no alternative route alignments were considered in this Basic Assessment process. The nature of the project precludes consideration of meaningful technology and operational alternatives. As such, this was not explored.

This Basic Assessment was based on two design alternatives for the route at the existing railway line. The preferred option (Alternative 1) proposes an overpass (bridge) while Alternative 2 considered an underpass. For technical reasons, that has serious maintenance and financial implications, as detailed above.

The Applicant is mandated to provide transport networks for the City of Cape Town and would not propose developments beyond this scope. The Applicant wishes to develop to IRT networks throughout the City of Cape Town and, therefore, no activity alternatives were (or could have been) considered.

The preferred alternative maximises on design potential. Provision of the largest cross-section possible enables the delivery of the best possible product and service to the community in the form of a useful and valuable network for public transport. The road needs to accommodate normal vehicular traffic as well as the IRT buses such that traffic flow remains smooth and that those buses, ideally, have their own lanes. This can be achieved with Alternative 1. From a biophysical perspective, there are no sensitive greas along the surface of the route which would have to be avoided which further supports the preferred layout alternative.

It is acknowledged that, for those in the vicinity of the railway crossing, Alternative 2 (underpass) may be more visually acceptable if compared to the preferred Alternative 1. However, the overpass structure offers substantial benefits in terms of minimizing continual groundwater and soil disruption. During geotechnical investigations, it was determined that the location has a relatively shallow water table, which would require a robust and costly subsoil system for managing groundwater if an underpass were to be considered. Continuous groundwater pumping would be required to keep the underpass dry, which would be both operationally demanding and expensive to maintain over time. In contrast, the overpass avoids this groundwater management issues, offering a more sustainable, cost-effective and viable solution in the long term.

Furthermore, the continuous operation of a pump generator to manage groundwater presents significant environmental and security challenges. Continuous operation of a pump generator would lead to ongoing emissions, primarily carbon dioxide (CO2), if powered by fossil fuels. This contributes to climate change by increasing the carbon footprint of the project. The constant running of generators also places a strain on energy resources. As efforts are being made worldwide to reduce emissions and shift towards more sustainable practices, the reliance on such energy-intensive methods becomes increasingly counterproductive in terms of environmental goals.

Homeless individuals may seek shelter in an underpass, particularly in areas where the environment is more sheltered and protected from the elements. While this may offer temporary relief to the individuals, it creates security concerns for the surrounding community. The presence of vagrants in the area could lead to risks such as theft, vandalism, or even accidents, especially if the underpass is not properly monitored.

Addressing these challenges requires a balance between social and environmental responsibility, energy efficiency, and ensuring the security of infrastructure in a way that is both sustainable and safe for all parties involved.

Overall, the overpass option provides a more practical, cost-effective, environmentally friendly and safer solution, aligning with sustainable development principles and minimizing the need for extensive maintenance and management measures.

The EAP acknowledges that the visual and social specialist believes that an alternative route should have been considered as part of this Basic Assessment, Additionally, this recommendation/opinion is acknowledged as part of the Heritage Practitioners However, as previously mentioned, a thorough route analysis which considered multiple factors, including technical/engineering aspects and property acquisition requirements, informed the most reasonable and feasible route, which was then taken into the environmental investigations.

#### "No-Go" areas 2.

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).

Given the transformed nature of the site, there are no strictly prohibited areas along the route in terms of environmentally sensitive zones that must be completely avoided. However, the EMPr states that construction activities should be confined to the development footprint as much as possible to avoid unnecessary impacts on adjacent properties and occupants.

As per (NCC, 2023b), the following no-go areas will be established:

All aquatic features located adjacent to the proposed development's construction corridor are to be demarcated as
no-go areas to avoid unnecessary disturbance from construction activities. These areas are to be avoided from all
construction and site establishment activities, and the EMPr specifies the need for rehabilitation should there be
encroachment.

In addition, as per Gibb (2024) the following no-go areas will be established on site:

• Established tree clusters to be retained on site are to be designated as 'no-go areas' for site camp establishment, materials storage, stockpiling, dumping, to avoid and prevent damage or intrusion to these areas.

# 3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.

Specialist studies have been conducted, including:

- A Terrestrial Biodiversity Compliance Statement
- An Aquatic Biodiversity Compliance Statement
- A Social Impact Assessment
- A Socio-Economic Impact Assessment
- A Visual Impact Assessment
- A Heritage Impact Assessment
- A Noise Impact Assessment

The Conceptual Design Review Report compiled for the proposed development by HHO Consulting Engineers has also been considered to inform this report.

These specialist studies have been conducted by reputable professionals with the aim of identifying potential environmental impacts of the proposed development, as well as measures to mitigate any environmental impacts. The assessment methods are deemed acceptable for the nature and scale of the development and comply with 'the Protocols' for assessment and reporting of environmental impacts.

Other impacts have been assessed by the EAP.

Furthermore, the scope of the study has been determined with reference to the requirements of the relevant legislation, namely the NEMA EIA Regulations, as amended in 2017. The main responsibilities of the environmental consultant would include but not be limited to, the following, as stipulated in the EIA Regulations:

- Pre-application consultation with the Department of Environmental Affairs and Development Planning (DEA&DP) in order to highlight any key issues and/or requirements early in the process;
- Submission of a Notice of Intent to the DEA&DP to make them aware of the proposal and forthcoming application;
- Submission of the required Application Form to the DEA&DP, to register the proposed project, and obtain the applicable reference number;
- Consultation with the relevant authorities and stakeholders, through the Basic Assessment process, to ensure that identification of relevant issues or concerns are undertaken;
- Ensure the assessment of and response to the issues that are raised;
- Compilation of the required BAR, describing the proposed activity, the affected environment, the potential environmental impacts, all applicable legislation and applicable guidelines, the detail of the public participation process followed, and the findings of the specialist studies and recommendations and/or mitigations measures to be implemented during construction and operation;
- Submission of the BAR to the public for comment and to the DEA&DP for a decision (to be undertaken).

One of the fundamental aims of a Basic Assessment process is to ensure that the demands of sustainable development are met on a project level, within the context of the greater area. The most common definition of sustainable development is development that meets the needs of the present while not compromising the needs of future generations.

The Basic Assessment for the proposed IRT bus lanes and foundations for bus stops is therefore being undertaken with sustainable development as a goal. The assessment has looked at the impacts of the proposals on the environment and the surrounding communities and assessed the significance of these, and proposes mitigation measures, as required, to reduce anticipated impacts to acceptable levels. This is to ensure that the development makes "equitable and sustainable use of environmental and natural resources for the benefit of present and future generations".

The overall assessment criteria are based on the requirements of the National Environmental Management, 1998 (Act 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014. Refer to the methodology included in **Appendix Q**.

The assessment criteria and methods employed by each specialist have been indicated in the various specialist reports contained in **Appendix G**.

The methods used have been carried out according to the legal requirements for such a process and are considered sufficient for this purpose.

# 4. Assessment of each impact and risk identified for each alternative

**Note:** The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

# PLANNING, DESIGN AND DEVELOPMENT PHASE

# **GENERAL**

RESOURCE USE:				
Alternatives	PREFERRED ALTERNATIVE DESIGN ALTERNATIVE (OVERPASS) (UNDERPASS)		NO-GO ALTERNATIVE	
Potential impact and risk:	DEPLETION OF NATURAL RE	SOURCES		
Nature of impact:	Construction of the development and the associated use of natural resources, such as water, resources for the generation of energy, construction materials etc.		No impact	
Extent and duration of impact:	Widespread beyond site boundary, Short-term		Widespread beyond site boundary, duration not applicable as there will be no impact (i.e., no construction activities)	
Consequence of impact or risk:	Depletion in natural resour	rces	None	
Probability of occurrence:	Definite			
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low		
Degree to which the impact can be reversed:	Irreversible		Reversible	
Indirect impacts:	Fewer natural resources available for development		None	
Cumulative impact prior to mitigation:	Very low (-)		Zero	
Significance rating of impact prior to mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	Medium (-)		Zero	
Degree to which the impact can be avoided:	Low		Not applicable	
Degree to which the impact can be managed:	High		Not applicable	
Degree to which the impact can be mitigated:	High		Not applicable as there would be no impacts to mitigate.	
Proposed mitigation:	Implementation of the specifications contained in the EMPr.		Not applicable	
Residual impacts:	Controlled use of natural resources and avoidance of wastage		None	
Cumulative impact post mitigation:	Very low (-)		Not applicable	
Significance rating of impact after mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)  NOTE ON SIGNIFICANCE OF IMPACT: SUI	Low (-)		Not applicable	

SUBSIDENCE (HHO, 2025):

Alternatives	PREFERRED ALTERNATIVE (OVERPASS)	DESIGN ALTERNATIVE (UNDERPASS)	NO-GO ALTERNATIVE			
Potential impact and risk:	Potential impact and risk:  Surface subsidence as a result of partial removal, infill and compaction activities					
Nature of impact:	N/A as Impact	Negative	None			
Extent and duration of impact:	was only identified for the	Local and long-term	None			
Consequence of impact or risk:	Design Alternative (Underpass).	Compromised building structure	Not applicable			
Probability of occurrence:		Low	Not applicable			
Degree to which the impact may cause irreplaceable loss of resources:		Low to negligible	Not applicable			
Degree to which the impact can be reversed:		High	Not applicable			
Indirect impacts:		Physical degradation of development structures Impact on local water table Impact to the local railway line Risk to temporary works	Not applicable			
Cumulative impact prior to mitigation:	1	High (-)	Not applicable			
Significance rating of impact prior to mitigation (e.g., Low, Medium, Medium- High, High, or Very-High)		High (-)	Not applicable			
Degree to which the impact can be avoided:		Low	Not applicable			
Degree to which the impact can be managed:		Medium	Not applicable			
Degree to which the impact can be mitigated:		Medium	Not applicable			
Proposed mitigation:		The removal of soil and existing layer works will be implemented. This removed fill will be replaced with a quality material to ensure stabilisation of substrate.  Continual dewatering of the underpass structure.	Not applicable			
Residual impacts:		None	Not applicable			
Cumulative impact post mitigation:		None Impact to the water table and surrounding buildings. Noise impact to the surrounding residents.	None			
Significance rating of impact after mitigation (e.g., Low, Medium, Medium- High, High, or Very-High)		Medium/High (-)	Not Applicable			
NOTE ON SIGNIFICANCE OF IMPAC	T: Subsequent to miti	igation, the residual impac	cts are deemed to be insignificant.			

Alternatives	PREFERRED ALTERNATIVE (OVERPASS)	DESIGN ALTERNATIVE (UNDERPASS)	NO-GO ALTERNATIVE	
Potential impact and risk:	Disruption to existing tr	Disruption to existing traffic patterns		
Nature of impact:	General traffic conges Road extent will be no to the reduction of cap	The IRT bus service will experience minimal delays. General traffic congestion along the entire South Road extent will be noticeable. This is mainly due to the reduction of capacity (single general traffic lane in each direction) and the introduction of exclusive use NMT lanes.		
Extent and duration of impact:	Local and short-term	Local and short-term	None	

Consequence of impact or risk:	General traffic will experience delays and long queues at intersections	General traffic will experience delays and long queues at intersections	Not applicable
Probability of occurrence:	Definite	Definite	Not applicable
Degree to which the impact may cause irreplaceable loss of resources:	Low to negligible	Low to negligible	Not applicable
Degree to which the impact can be reversed:	Partially reversable	Partially reversable	Not applicable
Indirect impacts:	Increased driver frustration and traffic congestion during the peak periods	Increased driver frustration and traffic congestion during the peak periods	Not applicable
Cumulative impact prior to mitigation:	Medium (-)	Medium (-)	Not applicable
Significance rating of impact prior to mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Medium (-)	Not applicable
Degree to which the impact can be avoided:	Low to Medium	Low to Medium	Not applicable
Degree to which the impact can be managed:	Medium to High	Medium to High	Not applicable
Degree to which the impact can be mitigated:	Medium	Medium	Not applicable
Proposed mitigation:	Construction activities to follow an approved sequence to be approved with the Traffic Management Plan, which includes the use of flag people, road signage and maintaining existing traffic lanes, where possible	Construction activities to follow an approved sequence to be approved with the Traffic Management Plan, which includes the use of flag people, road signage and maintaining existing traffic lanes, where possible	Not applicable
Residual impacts:	Reduced traffic flows and driver frustration	Reduced traffic flows and driver frustration	Not applicable
Cumulative impact post mitigation:	Low (-)	Low (-)	Not applicable
Significance rating of impact after mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)  NOTE ON SIGNIFICANCE OF IMPACT: Subsequent to mitigation, the residual impacts are deemed to be insignificant.			

# **SOCIAL (BARBOUR, 2024)**

NOTES IN RELATION TO THE BALBOUR 2024 STUDY AND REPORT:

- There is some overlap between the impacts identified and assessed by the social specialist (Barbour, 2024)
  and those covered by the socio-economic specialists (Urban-Econ, 2024). For completeness, the
  assessments of both are included in the BAR.
- The social specialist did not assess alternative 2 (underpass). Instead, he makes reference to the underpass
  being preferred from a social perspective due to the significant and permanent impact the bridge will have
  on property values. Urban-econ does however consider and assess socio-economic impacts of both
  alternatives.
- The impact tables and assessment methodology used by Mr Barbour differ to the format of the tables
  contained in the BAR template. Mr Barbour believes that his impact tables are adequate with no need to
  adjust these to align with the BAR template. He further states that his tables have successfully supported
  the decision-making process of other environmental applications in the Western Cape and nationally.

Nature	Creation of employment and construction phase	d business opportunities during the
	Without Mitigation	With Enhancement
Extent	Local – regional (2)	Local – regional (3)
Duration	Short term (2)	Short term (2)
Magnitude	Moderate (6)	Moderate (6)
Probability	Highly probable (4)	Definite (5)
Significance	Medium (40)	medium (55)

Status	Positive	positive
Reversibility	N/a	n/a
irreplaceable loss of resources	N/a	n/a
Can impact be enhanced	Yes	
Enhancement	To enhance local employment and business opportunities associated with the construction phase of the project the following measures should be implemented:  • The CCT should inform the local community leaders, organizations and councillors of the project and the potential job opportunities for local builders and contractors.  • The CCT should establish a database of local construction companies in the area, specifically SMME's owned and run by HDI's, prior to the commencement of the tender process for the	
	<ul> <li>project. These companies should be notified of the tender process and invited to bid for project related work.</li> <li>The CCT in consultation with the appointed contractor/s should look to employ a percentage of the labour required for the construction phase from local area to maximize opportunities for members from the local HD communities.</li> </ul>	
	However, while the use of local building contractors and workers is recommended, it is recognised that a competitive tender process may not guarantee the employment of local companies and labour during the construction phase.	
Cumulative impacts	Opportunity to upgrade and improv	
Assessment on No Go Option	There is no impact as it maintains the	e current status quo.

Nature	Potential impacts on family structures and social networks associated with the presence of construction workers		
	Without mitigation	With Mitigation	
Extent	Local (2)	Local (1)	
Duration	Short term (2)	Short Term (2)	
Magnitude	Minor (2)	Minor (2)	
Probability	Probable (3) EAP'S NOTE: While the social specialist believes that there will be an impact on the family structures and social networks because of construction workers in the area, (i.e. spread of HIV/AIDS), the EAP finds this impact more relevant in rural areas, where migrant labourers are required to live amongst the local community. This will not be the case in an urban area such as Wynberg. The labour force will return to their homes at the end of each work day.	Probable (3) EAP'S NOTE: While the social specialist believes that there will be an impact on the family structures and social networks because of construction workers in the area, (i.e. spread of HIV/AIDS), the EAP finds this impact more relevant in rural areas, where migrant labourers are required to live amongst the local community. This will not be the case in an urban area such as Wynberg. The labour force will return to their homes at the end of each work day.	
Significance	Low (18)	Low (15)	
Status	Negative	Negative	
Reversibility	No in case of HIV and AIDS	No in case of HIV and AIDS	
irreplaceable loss of resources	Yes, if people contract HIV/AIDS		
Can impact be enhanced (EAP NOTE: Assume this to mean can the impact be mitigated)	Yes, to some degree. However, the risk cannot be eliminated. (See note above)		
Mitigation	<ul> <li>The potential risks associated with construction workers can be mitigated.</li> <li>The aspects that should be covered include:</li> <li>The CCT should establish a Monitoring Committee (MC) to monitor construction phase of the project. The MC should</li> </ul>		

	<ul> <li>include representatives from the CCT, contractors, local ward councillor and representatives from the community.</li> <li>The CCT should establish a Grievance Mechanism (GM) that enables members from the local community to reports concerns. The GM should provide a procedure for receiving, screening, addressing, and recording/documenting complaints and communication from affected communities. The GM should be easily accessible and communicated to affected communities. The GM should also make provision to ensure the confidentiality of the person raising the complaint is protected if requested.</li> <li>The MC and GM should be put in place before construction commences.</li> <li>The CCT should appoint local contractors.</li> <li>The CCT in consultation with the appointed contractor should implement an HIV/AIDS awareness programme for all construction workers at the outset of the construction phase.</li> <li>The movement of construction workers on and off the site should be closely managed and monitored by the contractors. (EAP assumes this relates to the immediate vicinity around the site to prevent loitering)</li> <li>No construction workers, with the exception of security personnel, should be allowed to stay on site overnight.</li> </ul>
Cumulative impacts	Impacts on family and community relations that may, in some cases, persist for a long period. Also, in cases where unplanned / unwanted pregnancies occur or members of the community are infected by an STD, specifically HIV and or AIDS, the impacts may be permanent and have long term to permanent cumulative impacts on the affected individuals and/or their families and the community. (See EAP comment above)
Assessment on No Go Option	There is no impact as it maintains the current status quo

Nature	Potential safety and security risk posed by presence of construction workers on site			
	Without mitigation	With Mitigation		
Extent	Local (2)	Local (1)		
Duration	Short Term (2)	Short term (2)		
Magnitude	Moderate (6)	Low (4)		
Probability	Highly Probable (4)	Probable (3)		
Significance	Medium (40)	Low (24)		
Status	Negative	Negative		
Reversibility	No, if local residents are murdered	No, if local residents are murdered		
	or physically harmed	or physically harmed		
irreplaceable loss of resources	Yes, if family member is murdered Yes, if family member if mu			
Can impact be enhanced (EAP assumed mitigated)	Yes			
Mitigation	The CCT and contractors cannot be held responsible for the off-site after-hours behaviour of all construction employees. However, the contractors appointed by the CCT should ensure that all worker employed on the project are informed at the outset of the construction phase that any construction workers found guilty of theft will be dismissed and charged. All dismissals must be in accordance with South African labour legislation. In addition, the following mitigation measures are recommended.  • The CCT should establish a MC and put in place a GM before construction commences (see above).  • The CCT should establish a GM.  • No construction workers, except for security personnel, should be allowed to stay on site overnight.			

	<ul> <li>Construction related activities should comply with all relevant building regulations. In this regard activities on site should be restricted to between 07h00 and 18h00 during weekdays and 08h00 and 13h00 on Saturdays.</li> <li>The need to undertake work after 13h00 on Saturdays and on Sundays should be discussed with the MC.</li> </ul>
Cumulative impacts	No
Assessment on No Go Option	There is no impact as it maintains the current status quo.

Nature	Potential noise, dust and safety impacts associated with moveme construction related traffic to and from the site		
	Without mitigation	With Mitigation	
Extent	Local – Regional (2)	Local -Regional (1)	
Duration	Short Term (2)	Short Term (3)	
Magnitude			
Probability	, ,	· · · · · · · · · · · · · · · · · · ·	
Significance	Medium (33)		
Status	Negative		
Reversibility	Yes		
irreplaceable loss of resources	No	No	
Can impact be enhanced	Yes		
Cumulative impacts	<ul> <li>The CCT should prepare construction phase comprovide information on location of stop-go's, duetc. The CP should max social media (Faceboresidents, schools, and construction activities.</li> <li>Measures should be put users during the morni includes measures to emorning peak period impacted by the construction related activitien community before being</li> <li>Construction related activitien peutodial to be discussed community before being</li> <li>Construction related activitien peutodial to be discussed community before being</li> <li>Construction related activitien peutodial to between 000 and 13h00 on Saturativities and 13h00 on Saturativities work after 13h00 on Saturativities work after 13h00 be discussed with the Miles activities such as wetting ensuring that vehicles materials are fitted with</li> <li>All vehicles must be road made aware of the positicit speed limits.</li> </ul>	Aciderate (6)  Robable (3)  Redium (33)  Low (24)  Regative  Regat	
Assessment on No Go Option	I There is no impact as it maintains	the current status quo.	

# SOCIO-ECONOMIC (URBAN-ECON, 2024)

LEGAL EVICTION OF AFFECT	LEGAL EVICTION OF AFFECTED HOUSEHOLDS			
Alternatives	Alternative 1 (Rail Overpass) PREFERRED	Alternative 2 (Rail Underpass)	No-Go Alternative	
Potential impact and risk:	Legal eviction of affected households	Legal eviction of affected households	Legal eviction of affected households	
Nature of impact:	Negative	Negative	No impact	
Extent and duration of impact:	Local – Long - Term	Local – Long - Term	None	
Consequence of impact or risk:	Moderate	Moderate	None	
Probability of occurrence:	Definite	Definite	None	
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None	
Degree to which the impact can be reversed:	Irreversible	Irreversible	None	
Indirect impacts:	None	None	None	
Cumulative impact prior to mitigation:	Medium (-)	Medium (-)	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Medium (-)	None	
Degree to which the impact can be avoided:	unavoidable	unavoidable	None	
Degree to which the impact can be managed:	Low	Low	None	
Degree to which the impact can be mitigated:	Low	Low	None	
Proposed mitigation:	- Provide assistance for affected households to find suitable alternative housing options, potentially within the same neighbourhood or vicinity to minimise social disruption.	- Provide assistance for affected households to find suitable alternative housing options, potentially within the same neighbourhood or vicinity to minimise social disruption.	None	
Residual impacts:	None	None	None	
Cumulative impact post mitigation:	Low	Low	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Low (-)	None	

TEMPORARY IMPACT ON LOCAL ECONOMY (GDP)			
Alternatives	Alternative 1 (Rail Overpass) PREFERRED	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Temporary Impact on Gross Value Added	Temporary Impact on Gross Value Added	Temporary Impact on Gross Value Added
Nature of impact:	Positive	Positive	No impact
Extent and duration of impact:	Regional – Short-Term	Regional – Short-Term	None
Consequence of impact or risk:	High	High	None
Probability of occurrence:	Highly probable	Highly probable	None

	T		Г
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None
Degree to which the impact can be reversed:	Irreversible	Irreversible	None
Indirect impacts:	N/A	N/A	None
Cumulative impact prior to mitigation:	Medium (+)	Medium (+)	None
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (+)	Medium-High (+)	None
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the impact can be managed:	Low	Low	None
Degree to which the impact can be mitigated:	Low	Low	None
Proposed mitigation:	To optimise benefits for the local economy, the project developers should employ locally sourced materials, goods and products whenever possible. Likewise, for the construction of the road, subcontracting to local construction firms should be prioritized to the greatest extent possible.	To optimise benefits for the local economy, the project developers should employ locally sourced materials, goods and products whenever possible. Likewise, for the construction of the road, subcontracting to local construction firms should be prioritized to the greatest extent possible.	None
Residual impacts:	Short-term economic injection into the local and regional economy.	Short-term economic injection into the local and regional economy.	None
Cumulative impact post mitigation:	high	high	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	High (+)	High (+)	None

TEMPORARY IMPACT ON EM	PLOYMENT		
Alternatives	Alternative 1 (Rail Overpass) PREFERRED	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Creation of temporary job opportunities	Creation of temporary job opportunities	Creation of temporary job opportunities
Nature of impact:	Positive	Positive	No Impact
Extent and duration of impact:	Regional – Short-term	Regional – Short-term	None
Consequence of impact or risk:	Medium	Medium	None
Probability of occurrence:	Highly probable	Highly probable	None
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None
Degree to which the impact can be reversed:	Irreversible	Irreversible	None
Indirect impacts:	None	None	None
Cumulative impact prior to mitigation:	Medium (+)	Medium (+)	None
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (Positive)	Medium (Positive)	None
Degree to which the impact can be avoided:	unavoidable	unavoidable	None

Dograp to which the	Г	Г	
Degree to which the impact can be managed:	Low	Low	None
Degree to which the impact can be mitigated:	Very Low	Very Low	None
Proposed mitigation:	- Coordinate Community Information Events to inform local residents about upcoming projects and employment opportunities available for application - Where feasible, effort must be made to employ locally to create maximum benefit for the communities Sub-contract to local construction companies particularly SMMEs and BBBEE compliant enterprises where possible - Use local suppliers where feasible and arrange with the local SMMEs to provide transport, catering and other services to the construction crews.	- Coordinate Community Information Events to inform local residents about upcoming projects and employment opportunities available for application - Where feasible, effort must be made to employ locally to create maximum benefit for the communities Sub-contract to local construction companies particularly SMMEs and BBBEE compliant enterprises where possible - Use local suppliers where feasible and arrange with the local SMMEs to provide transport, catering and other services to the construction crews.	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	Medium	Medium	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (Positive)	Medium-High (Positive)	None

TEMPORARY IMPACT ON HOUSEHOLD INCOME			
Alternatives	Alternative 1 (Rail Overpass) PREFERRED	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Temporary impact on household income	Temporary impact on household income	Temporary impact on household income
Nature of impact:	Positive	Positive	No Impact
Extent and duration of impact:	Regional – Short- term	Regional – Short- term	None
Consequence of impact or risk:	Medium	Medium	None
Probability of occurrence:	Highly probable	Highly probable	None
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None
Degree to which the impact can be reversed:	Irreversible	Irreversible	None
Indirect impacts:	None	None	None
Cumulative impact prior to mitigation:	High (+)	High (+)	None
Significance rating of impact <u>prior to mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium- High (+)	Medium- High (+)	None
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the impact can be managed:	Low	Low	None
Degree to which the impact can be mitigated:	Very Low	Very Low	None
Proposed mitigation:	Prioritise hiring residents for construction jobs to increase household incomes within the community.	Prioritise hiring residents for construction jobs to increase household incomes within the community.	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	High	High	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	High (+)	High (+)	None

TEMPORARY IMPACT ON SENSE OF PLACE				
Alternatives	Alternative 1 (Rail Overpass) PREFERRED	Alternative 2 (Rail Underpass)	No-Go Alternative	
Potential impact and risk:	Temporary impact on sense of place	Temporary impact on sense of place	Temporary impact on sense of place	
Nature of impact:	Negative	Negative	No impact	
Extent and duration of impact:	Regional – Short term (EAP note: in consultation with the specialist, it was mutually agreed that this extent is more accurate as local)	Regional – Short term (EAP note: in consultation with the specialist, it was mutually agreed that this extent is more accurate as local)	None	
Consequence of impact or risk:	Medium	Medium	None	
Probability of occurrence:	Definite	Definite	None	
Degree to which the impact may cause irreplaceable loss of resources:	Complete loss of resources	Complete loss of resources	None	
Degree to which the impact can be reversed:	Irreversible	Irreversible	None	
Indirect impacts:	None	None	None	
Cumulative impact prior to mitigation:	None	None	None	

Significance rating of impact <u>prior to mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Medium (-)	None
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the impact can be managed:	Moderate	Moderate	None
Degree to which the impact can be mitigated:	None	None	None
Proposed mitigation:	No mitigation measures envisioned	No mitigation measures envisioned	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	None	None	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Medium (-)	None

TEMPORARY IMPACT ON TRAFFIC CONGESTION				
Alternatives	Alternative 1 (Rail Overpass) PREFERRED	Alternative 2 (Rail Underpass)	No-Go Alternative	
Potential impact and risk:			Temporary impact on ease of commute	
Nature of impact:	Negative	Negative	None	
Extent and duration of impact:	Local – short term	Local – short term	None	
Consequence of impact or risk:	Medium	Medium-hgih	None	
Probability of occurrence:	Definite	Definite	None	
Degree to which the impact may cause irreplaceable loss of resources:	No loss	No loss	None	
Degree to which the impact can be reversed:	Fully reversible	Fully reversible	None	
Indirect impacts:	None	None	None	
Cumulative impact prior to mitigation:	Medium	Medium	None	
Significance rating of impact <u>prior to mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-high (-)	Medium-high (-)	None	
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None	
Degree to which the impact can be managed:	Moderate	Low	None	
Degree to which the impact can be mitigated:	High	Medium	None	
Proposed mitigation:	- Providing alternative routes for commuters to bypass the construction area, minimizing congestion on affected roads Implement temporary traffic	- Providing alternative routes for commuters to bypass the construction area, minimizing congestion on affected roads Implement temporary traffic control measures	None	

	control measures	such as signage,	
	such as signage,	signal to	
	signal to	manage traffic	
	manage traffic	flow and	
	flow and	minimise delays.	
	minimise delays.	- efforts should be	
	- efforts should be	made to keep	
	made to keep	construction	
	construction	vehicles out of	
	vehicles out of	residential areas	
	residential areas	as much as	
	as much as	possible, and	
	possible, and	scheduling	
	scheduling	construction	
	construction	activities during	
	activities during	off-peak times to	
	off-peak times to	mitigate traffic	
	mitigate traffic	congestion for	
	congestion for	residents in the	
	residents in the	area.	
	area.		
Residual impacts:	None	None	None
Cumulative impact post	Low	Low	None
mitigation: Significance rating of			
impact after mitigation			
(e.g. Low, Medium, Medium-High, High, or	Low (-)	Low (-)	None
Very-High)			

# VISUAL (GIBBS, 2024)

Note: the visual specialist assessed an earlier version of the overpass design as a separate alternative. This is no longer relevant and was excluded from the below table.

VISUAL IMPACTS				
Alternatives	ALTERNATIVE 1 (OVERPASS) PREFERRED	ALTERNATIVE 2 (UNDERPASS)	NO-GO ALTERNATIVE	
PLANNING, DESIGN AND DE	VELOPMENT PHASE			
Potential impact and risk:	Some visual intrusion into urban cultural landscape environment	Site clearance, removal of existing materials; earthworks, site establishment.	Continuation of status quo	
Nature of impact:	Negative. Potential impact on views resulting from cranage/hoarding/construction works	Negative. Potential impact on views resulting from cranage/hoarding/construction works	Negative. Potential deterioration of the visual quality of the site.	
Extent and duration of impact:	Local, short term	Local, short term	Local, short term	
Consequence of impact or risk:	Visual disturbance of status quo, foreground construction activity	Visual disturbance of status quo, foreground construction activity	N/A	
Probability of occurrence:	Definite	Definite	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Medium/High	Medium/High	Low	

Degree to which the	Low	Low	Low
impact can be reversed:  Indirect impacts:	Increased activities associated with construction (later in time, elsewhere in space)	Increased activities associated with construction (later in time, elsewhere in space)	
Cumulative impact prior to mitigation:	Adds to existing infrastructure within the immediate context	Adds to existing infrastructure within the immediate context	N/A
Significance rating of impact prior to mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	High (-)	Moderate (-)	Neutral
Degree to which the impact can be avoided:	Low	Low	Low
Degree to which the impact can be managed:	Low/Medium	Low/Medium	High
Degree to which the impact can be mitigated:	Low/Medium	Low/Medium	High
Proposed mitigation:	<ul> <li>Indicate 'no-go areas' - off limits for site camp/storage.</li> <li>Limiting construction within hoarding areas.</li> <li>Post-construction rehabilitation/environ mental improvement.</li> <li>Site rehabilitation and management, noise, and dust control.</li> </ul>	<ul> <li>Indicate 'no-go areas' - off limits for site camp/storage.</li> <li>Limiting construction within hoarding areas.</li> <li>Post-construction rehabilitation/enviro nmental improvement.</li> <li>Site rehabilitation and management, noise, and dust control.</li> </ul>	N/A
Residual impacts:	Controlled adverse visual impacts for a short duration	Controlled adverse visual impacts for a short duration	N/A
Cumulative impact post mitigation:	Neutral due to implementation of Construction Phase EMP.  Neutral due to implementation of Construction Phase EMP.		Neutral
Significance rating of impact after mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	Moderate (-)	Moderate (-)	Neutral

# HERITAGE (O'DONOGUE, 2024)

NOTES IN RELATION TO THE O'DONOGHUE 2024 STUDY AND REPORT:

- The heritage specialist did not assess alternative 2 (underpass). Instead, she makes reference to the underpass being preferred from a heritage perspective due to the findings indicating high negative social, visual and townscape impacts.
- The impact tables and assessment methodology used by O'Donoghue differ to the format of the table contained in the BAR. O'Donoghue has used similar methodology to Barbour (2024) and believes that this impact table is adequate with no need to adjust these to align with the BAR template. She further states that this table format has successfully supported the decision-making process of other environmental applications in the Western Cape and nationally.

Assessed impacts on:	Townscape, road closures, built environment, natural environment, public realm including streetscape and NMT, left over land, railway crossing.  The underpass to the railway line was not presented as an alternative with drawings i.e. there was no alternative presented		
Assessed impacts	Assessment without mitigation measures	Assessment with mitigation measures	No Go Alternative

Nature	Road and bridge		
	infrastructure,		
	landscaping, changes to		
	townscape,		
	streetscape, built		
	environment, sense of		
	place		
Extent	Local – Regional (3)	Local – Regional (3)	N/A
Duration	Permanent (5)	Permanent (5)	N/A
Magnitude	High (8)	Moderate (6)	N/A
Probability	Definite (5)	Definite (5)	N/A
Significance	High Negative (80)	High Positive (70)	N/A
Status	High negative	Positive	
Reversibility	No, unless new	No, unless new	N/A
	infrastructure is	infrastructure is	
	demolished	demolished	
Irreplaceable loss of	Yes, certain Grade III	-	No loss
resources	heritage resources		
Can impact be mitigated?	Yes		
	Refer to Heritage Impact		
	Assessment,		
	report for PPP dated 27		
	September 2024		
	for lists of mitigation		
	measures.		
	Implementable mitigation		
	measures are detailed in		
	Section I2 and non-		
	implementable measures		
	are detailed in Section 13.		

EAP NOTE: The below table was included in the Heritage Impact Assessment. The EAP notes that this table
is not in alignment with the BAR template and is included here in the interest of transparency. The
recommendations contained therein have been acknowledged in Section I below based on those that
can be implemented within the EMPr and those that cannot.

NO.	INDICATOR	ASSESSMENT	RECOMMENDATION
1 Enh	ance Townscape and Herita	ge Resources	
1A	Enhance (rather than negatively impact) the townscape and heritage resources in the design of the route alignment.	Negative The proposal should respond to existing context and provide improved routes to NMT users and South Road property owners and users are only for the road infrastructure and landscaping. The lack of vehicular and pedestrian crossings reduce the spatial connection between the suburbs and the existing connectivity between the communities.	<ul> <li>Revise cross section of roads to accommodate landscaping and NMT route and differentiate between the norther and southern edges to reflect the context;</li> <li>Provide details for the NMT spaces abutting the roadway and future boundary wall definitions</li> <li>Design additional pedestrian and vehicular crossings over South Road</li> <li>Revise the landscape plan to indicate trees abutting Wynberg East (the northern edge of the road)</li> </ul>
	Ealing days section  Law January  Long freshmid  Deposed current physical cross-section (PHC)  Dossed route infrastructure	Secret later  Substitute of the second of th	Tended 1/pcrd paint (pcrd)  Recommended urban design route infrastructure

1B	Minimise the width of the road required	The NMT is designed with 2 dedicated bus and a minimum of 4 vehicular lanes (without the 2 turning lanes) South Road has been narrowed to accommodate the road.	Refer Urban Design recommendations for areas beyond the bus and vehicle lanes (drawings above).
1C	Reduce the demolition and negative impact of culturally significant buildings	Neutral	In order to realize this section of the IRT, the graded buildings in Waterbury Road, SW section of South Road, and the commercial building on the SE section of South Road have to be demolished. The proposed route cannot work unless these buildings are demolished.  These buildings are located at the gateways to the route. This gateway experience can be effectively replaced by hard and soft landscaping and material usage (refer below)
	it hasn't been reconfiguent language in the series of the properties fronting onto leading northwest into Verification in the street lighting and bence and possibly public art of the public and character imbued trees on Rosmead Avenuent Realignment of the properties facing onto sense of a gateway to Sense and integer to the properties of the properties and integer the sense of a gateway to Sense and the properties and integer the sense of a gateway to Sense and the properties and integer the sense of a gateway to Sense and the properties and integer the sense of a gateway to Sense and the properties and integer the sense of a gateway to Sense and the properties and integer the sense of a gateway to Sense and the properties and integer the sense of a gateway to Sense and the properties and the propert	Int of the end of Ottery Road where ared to terminate in a cul-de-sace the residential and commercial. Ottery Road as an activity street are as a space should include improved the environment such as new paving, and a seating, additional tree planting and or sculpture are the existing sense of place by the existing row of Blue gum use are proposed cycle lane and NMT in Road and the link northwards to consolidation opportunities for this intersection to improve the couth Road aration with the development in Herbert Sports Complex by the	Recommended Eastern galeway design  Recommendations  Shared surface treatment of Waterbury Road to enable continued access to existing residential properties  Consolidation of residual land, as well as project packaging to enable rezoning and handover to CCT Housing department  New development block to provide additional residential dwelling units and maximise the use of residual land from the CCT property acquisition  Promote the activation of street interface conditions of Waterbury Road and Exeter Road to add 'eyes on the street' and improve public safety  Additional green space and street trees to soften the existing public environment and replace open space lost through the construction of the proposed bridge  Green screen/ planted treatment of proposed MSE retaining wall to counter the negative affects of the bridge to residential complexes south of the bridge  Opportunity to improve and enhance the public environment at the tiein with Main Road. Improved public amenity including bench seating, street lighting and tree planting.
1D	Reduce the spatial separation between the opposite sides of the	Negative	The proposed spatial separation can be reduced with additional NMT and vehicular crossings, in addition to new community use facilities on both edges of the
1E	route.  Design an improved  'sense of place' around  the routes	Negative No proposals except for soft	roadway.  The improved sense of place is required and recommended in the Urban Design recommendations on use of the land beyond the vehicle and bus routes.

landscaping are proposed with

No proposals except for soft

landscaping are proposed

the road

Negative

Introduce place-making

strategies at bus/transit

on use of the land beyond the vehicle and bus routes,

that include community facilities (e.g. parks), appropriate density and use future development.

Landscape Plan should this be guided by the Urban

Design study for the major intersections to be designed with consideration for pedestrian movement (and at

1F

the routes

stops

			the later buildings development stage for positive and interactive building interfaces).
1G	Include public art	Negative	No public art is proposed at this stage of the project. This aspect is recommended to enhance the public environment at the intersections of Main and Waterbury Roads, and South and Ottery Roads. This aspect of the development should be managed by the CCT Arts & Culture and/ or Heritage Resources Management.
2 Roa	d Infrastructure supporting to	ownscape and local businesses	
2A	Retain the existing granite and sandstone kerbs.	Neutral	Information required as to where the historic kerbs are existing and to be relocated on the route.
2B	Retain on street parking to support the businesses and community facilities	Unknown	Create multifunctional parking courts in resultant open spaces.
2C	Locate bus stops close to mixeduse nodes and high use areas	Neutral It is expected the use of on the properties adjacent to the route will develop commercial use activities.	The two bus stops planned on the W8 route are located on South Street at the intersection of Kent and Pluto Roads. This is designed to be a high use area as the only road that crosses South Road. Presently the Wynberg East buildings at the intersection are a creche and a residential use building.
2D	Plan for new development on vacant sites along the proposed road to ensure activities along the road	Neutral	Future development on the vacant, remaining land is to be planned by the relevant Directorates within the CCT. These development opportunities are therefore future to the W8 development.
2E	Maintain access links to abutting businesses and provide sufficient space to accommodate parking close to business activities and Churches.	Neutral	No on street parking is designed along the W8 route, but instead recommended to be accommodated in multifunctional parking courts in resultant open spaces.
3 Cull	urally Significant buildings a	and structures	
3A	Enhance the setting of culturally significant structures and buildings and ensure the character & streetscape of the area benefits.	Negative	The improved interface of the proposed roadway to the historic buildings is required (refer to point above).
3B	Retain all buildings along South Road north (Wynberg East), and mitigate the interface with the road	Positive, buildings are retained  Negative re interface	The improved interface of the roadway to the historic buildings is required (refer to point above).
3C	Design to enhance and retain local nodes, landmark buildings and mature trees that enhance the legibility of the townscape and route for the users.		The one landmark building along the route is proposed for demolition (café on SE section). Local nodes are provided with no special spatial character. Use the Urban Design informants to revise the application.
4 Veg	etation		
4A	Retain all mature trees on the road reserves abutting the proposed roadway where possible	Neutral	Refer Landscape Plan Certain trees have to be removed to realise the road infrastructure. Many new trees are proposed
4B	Plant trees where possible on sites and road reserves in the immediate context to the route, for example smaller 'pockets' of land abutting the route. Trees should also be underplanted withy low level plans i.e. not in paved surrounds	Positive	Landscape Plan to be revised to include:  Proposal of certain trees grouped together within interlinked vegetated beds that are also planted with low plants;  Information on how the tree and plant species will be varied within the planting programme;  Include SUDS where necessary to manage future increases in surface stormwater flow;  Details on hard landscaping, such as benches.

4C	Promote partnerships between the CCT, local civic/s to plant and maintain trees on public owned sites	TBA	CCT Recreational and Parks and Civics should organise the partnerships to benefit the landscaping on the proposed route
4D	Provide a minimum of a 12 month maintenance period to maintain and replant plants after the end of the construction phase	TBA	Commitment required from CCT Recreational and Parks to maintain the proposed vegetation over a two year period.
5 Non	Motorised Transport (NMT)	oute	
5A	Accommodate pedestrians and cyclists in a dedicated NMT route/s alongside the route	Positive	NMT routes are provided on both sides of the route, and enhanced per the UD recommendations, as follows:  Westbury [Waterbury] Road:  NMT connections – Maintain and enhance the pedestrian/ NMT connections either side of the railway (Exeter + Castletown Rd below the overpass bridge). Retaining walls/ columns of the overpass bridge should include appropriate lighting and mural art to improve public safety.  Treatment of road closures – Road closures will drastically vehicular movement patterns and redistribute traffic in the local area. In principle, maintain pedestrian permeability (Ashbury, Honiton, Chudleigh etc.) and allow for pedestrian crossing points at the identified intersections.  South Road: Connect public facilities – Local routes connecting nearby public facilities should be enhanced and improved, and maintain links to South Road. Encourage the walkability of Eden Road and the connection to Douglas Road Primary School.  Pedestrian safety – Higher future traffic volumes will occur on Pluto/ Kent Roads; and along Eden Road as an alternate vehicular throughfare. Encourage pedestrian safety measures around Douglas Road Primary School and the Wynberg Creche.  Potential shared street - Encourage the development of South Rd as a shared street to soften street edge.
			of South Rd as a shared street to soften street edge, promoting integration and tie- in with the proposed NMT and ensuring the continuity of access for properties facing onto South Road.  Ottery Road  Rosmead Ave/ Ottery Road – This intersection is currently vehicle-oriented and not very accommodating to pedestrians. There is a great opportunity to improve walkability and pedestrian safety through the redesign of this major intersection  Shared street treatment – Buildings facing onto Ottery Road sit adjacent to this busy intersection and harsh environment. A shared street treatment at the new proposed cul-de-sac would integrate with the current island- adding parking and improving pedestrian connectivity.  Gateways – The gateway from Rosmead Avenue is created by mature Blue gum trees. New intersection provides an opportunity to create a sense of place, integrate and open up the William Herbert Sports Complex to the public.
5B	Ensure safety for the users on the NMT route through separation of the route from the	Negative	No separation between NMT and vehicles is provides in the proposed route.

	1	1	
	vehicular lanes through level changes or/and bollards etc where possible;		Recommend safety features between the road and NMT routes are designed.
5C	Highlight the difference of the NMT route from the bus and vehicular lanes, for example through a different surface material and levels:	Positive	Detail required in landscape plan.
5D	Consider wider NMT routes at retail outlets, social amenities, intersections and nodes to provide safely for cyclists and pedestrians.	Positive	Wider NMT routes provided, such as intersections (positive)
5E	Pedestrian linkages should be especially enhanced around the proposed bus stations	Neutral	HHO to provide information on bus stops and their connectivity to the NMT and the local precincts.
5F	At nodes include trees, street furniture and amenities to provide pedestrian comfort	Neutral	Detailed hard landscape proposals required
5G	Provide opportunities to park cycles near bus stations to encourage inter-modal transit use	Neutral	Potential future business opportunities could be realised with the safe keeping of cycles. This is an entrepreneurial process can result post the development of the route, providing that buildings (and their businesses) can spatially relate to the route.
5H	If wide (>2m) NMT routes are not possible for the entire NMT length, provide pockets of spaces along the NMT route around bus stops and mixed-use precincts for sufficient pause and gathering where urban furniture such as benches, dustbins, electric boxes and landscaping/trees can be introduced.	TBA	NMT recommended for revision especially along the northern road edge.  Detailed Landscape plan that will respond to the hand landscaping requirements.
6 Bus	Stops		
6A	Provide universally accessible public space/ waiting area adjacent to bus stops which incorporates landscaping, sufficient sidewalk widths and urban furniture such as, but not limited to, lighting, a bench, dustbin, signage and a shading structure.	Achieved in all MyCiti routes	Detailed Landscape plan to include details of materials and hand landscaping.
6B	Locate transit stops close to high used areas	Positive	Bus stops located to the proposed only South Road intersection into Wynberg East and Plumstead
7 Und	eveloped Land		
7A	Design for future use of vacant areas abutting the route that remains post the route alignment, or was purchased in the past for this project and is not required with the new alignment	TBA	As recommended by the Urban Design study, the CCT maximize the use of land acquired by the CCT for implementation, and adequately programme leftover spaces. This will involve other Directorates within the CCT.
7B	Site definitions adjacent to the roadway should	Neutral	Further detail design required on all structures and boundary definitions abutting the roadway. These

	be defined in a sensible and aesthetic manner		structures may pre date the development of the land for future buildings.
10 Ne	w site boundary definitions		
10A	In principle new boundary treatments should not be high walled as this type of boundary definition reduces minimal visual surveillance on the street and has low sound absorption qualities	TBA	Boundary definitions between residences and the roadways to be designed to aesthetically complement the project site and provide sound reduction from the new road. Further detail design required on all structures and boundary definitions abutting the roadway.
10B	The surface of all walls should be finished in a product that discourages graffiti (for example, paint specification)	Neutral	To be specified in the project specifications
10C	The new boundaries present an opportunity for public art such as mosaic work and historic photographs printed on ceramic tiles	TBA	To be developed by the CCT or / and civic with Arts and Culture and/ or Heritage Management Branch invovelment.
11 So	cial Indicators		
11A	Project should be an opportunity to up-grade local areas and install new play equipment for children and or outdoor fitness equipment for the community as a whole	Neutral	Per Urban Design Study recommendations, recommended to be included into the proposal
11B	Design of bus stops should consider prevailing north-westerly winter wind and rain directions to ensure that passengers are adequately protected from the rain	Neutral	CCT standard bus shelter proposed due to consideration that the shelters become used by the homeless. Considering the social issues that occur presently with homelessness and unsocial behaviours it is understood that the bus shelters should be minimal, however it is also assessed as a lost opportunity to provide suitable bus stops that protect pedestrians from the weather elements and provide a positive user experience.
11C	CCT should ensure that required management and operational measures are put in place to ensure that the MyCiTi operations along W6 meet the stated objectives of providing safe, affordable, accessible, and efficient public transport	Positive	CCT strives to provide safe, affordable, accessible, and efficient public transport. The existing MyCiTi service is an example of this endeavour.
12 Re	ocation of people and busi	nesses	
12A	Involuntary relocation should, wherever possible be avoided	Positive	Certain properties are fully impacted, and tenants will be required to relocate. The SIA recommendations should be implemented by the CCT
12B	All people affected should be compensated fully and fairly for lost assets at market related prices	-	To be negotiated between the property owners and the CCT.  The negative impact on the value of the properties visually impacted by the proposed bridge may to some extent be mitigated, if the affected property owners are compensated by the CCT. This would require the CCT to offer to purchase the affected properties at a market related price or appoint an independent evaluator to assess the impact on property values that would inform the value of the compensation to be paid.

NOISE (SOUNDSCAPE, 2025)

NOISE IMPACTS	)		
Alternatives	ALTERNATIVE 1 (PREFERRED)	ALTERNATIVE 2	NO-GO ALTERNATIVE
PLANNING, DESIGN AND DEVELOPMEN	NT PHASE	1	ASSESSMENT
Potential impact and risk:	Construction activities associated with building a rail overpass and road, demolition of structures will generate noise (mobile and stationary construction equipment, vibrating and impact equipment, falling materials, reverse warning signals, impact and cutting tools etc.). Construction noise is variable, irregular, and impulsive in nature.  Noise from these activities will increase ambient noise levels currently experienced.  Increased noise levels may impact neighbouring residents bay causing nuisance and disturbance.	No construction therefore no noise impact.	
Nature of impact:	Negative		
Extent and duration of impact:	Local, short term		
Consequence of impact or risk:	Noise from construction activities nuisance.		
Probability of occurrence:	Definite		
Degree to which the impact may cause irreplaceable loss of resources:	Marginal to significant, dependin		
Degree to which the impact can be reversed:	Fully reversible		
Indirect impacts:	Indirect impacts of increased r include, but may not be limited decreased productivity due to sle levels, learning disruptions at scho		
Cumulative impact prior to mitigation:	High		
Significance rating of impact prior to mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	Medium-high		
Degree to which the impact can be avoided:	Unavoidable		
Degree to which the impact can be managed:	Moderate		
Degree to which the impact can be mitigated:	Moderate		
Proposed mitigation:	<ul> <li>Construction limited to an Avoid construction over</li> <li>Mobile diesel generation with exhaust silencers</li> <li>Withdraw equipment excessive noise.</li> <li>Use mobile acoustic jackhammers and composite and composite equipment/trucks</li> <li>Maintain temporary roa</li> </ul>		

Residual impacts:  Cumulative impact post mitigation:	Noise nuisance and disturbance will remain but will reduce due to restriction (daytime, workweek), informed community, management and mitigation measures.  Medium (-)	
Significance rating of impact after	Medium (-)	
mitigation (e.g., Low, Medium, Medium-High,	Medium (-)	

# **OPERATIONAL PHASE**

# **GENERAL**

TRAFFIC IMPACTS			
Alternatives:	PREFERRED ALTERNATIVE (OVERPASS)	DESIGN ALTERNATIVE (UNDERPASS)	NO-GO ALTERNATIVE
Potential impact and risk:	IMPROVEMENTS TO TRAFFIC C		
Nature of impact:	The operation of the IRT should result in more people making use of public transport services thus reducing traffic congestion and delays		No construction of the IRT therefore no change to status quo of the route
Extent and duration of impact:	Regional and Long-term	Regional and Long-term	Not applicable
Consequence of impact or risk:	Reduced private vehicle usage, reduced congestion, improved public transport service, safer and improved NMT facility that encourages pedestrian and cyclists movements	Reduced private vehicle usage, reduced congestion, improved public transport service, safer and improved NMT facility that encourages pedestrian and cyclists movements	Not applicable
Probability of occurrence:	Definite	Definite	Not applicable
Degree to which the impact may cause irreplaceable loss of resources:	Low to negliable	Low to negliable	Not applicable
Degree to which the impact can be reversed:	Low	Low	Not applicable
Indirect impacts:	Improved traffic flow and traffic patterns amended due to restricted access along South Road	Reduced capacity for general traffic; traffic patterns amended due to restricted access along South Road	Not applicable
Cumulative impact prior to mitigation:	High (+)	High (+)	Not applicable
Significance rating of impact prior to mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	Very High (+)	Very High (+)	Not applicable
Degree to which the impact can be avoided:	Very Low	Very Low	Not applicable
Degree to which the impact can be managed:	Very High	Very High	Not applicable
Degree to which the impact can be mitigated:	Very High	Very High	Not applicable
Proposed mitigation:	No mitigation proposed for positive impact	No mitigation proposed for positive impact	Not applicable
Residual impacts:	More efficient movement of traffic in the area	More efficient movement of traffic in the area	Not applicable
Cumulative impact post mitigation:	High (+)	High (+)	Not applicable
Significance rating of impact after mitigation	High (+)	High (+)	None

(e.g., Low, Medium, Medium-High,		
High, or Very-High)		

CLIMATE CHANGE IMPACTS				
Alternatives	PREFERRED ALTERNATIVE (OVERPASS)	DESIGN ALTERNATIVE (UNDERPASS)	NO-GO ALTERNATIVE	
Potential impact and risk:	REDUCTION IN GREENHOUSE GA			
Nature of impact:	Operation of the proposed route (i.e., the use of the route for public transport) would result in an increasing number of people making use of public transport over private transport. This would reduce the per capita emission of greenhouse gases in the surrounding community and beyond.		No impact	
Extent and duration of impact:	Widespread beyond site boundary (in the greater Cape Town area), Long-term		Widespread (beyond site boundary and in the greater Cape Town area) duration not applicable as there will be no impact (i.e., no operation of the proposed development as the development would not exist)	
Consequence of impact or risk:	Fewer greenhouse gas emissions, marginal prevention of further degradation in air quality		Opportunity cost	
Probability of occurrence:	Definite		No occurrence of operational activities	
Degree to which the impact may cause irreplaceable loss of resources:	Very low		None	
Degree to which the impact can be reversed:	Irreversible once the MyCiTi system has been established		Reversible, assuming development takes place	
Indirect impacts:	Marginally better future air quality		Opportunity Cost	
Cumulative impact prior to mitigation:	High (+)		Zero but positive impacts would be foregone.	
Significance rating of impact prior to mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	High (+)		Zero but positive impacts would be foregone.	
Degree to which the impact can be avoided:	Medium		None	
Degree to which the impact can be managed:	Medium		None	
Degree to which the impact can be mitigated:	Not desirable to mitigate a positive impact.		Not applicable as there would be no impacts to mitigate.	
Proposed mitigation:	Not applicable		Not applicable	
Residual impacts:	Not applicable		Not applicable	
Cumulative impact post mitigation:	High (+)		Zero but positive impacts would be foregone.	
Significance rating of impact after mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	High (+)		Zero but positive impacts would be foregone.	

**NOTE ON SIGNIFICANCE OF IMPACT:** Note that although fuel would be used and emissions would be generated by the buses, the volume of fuel used, and number of emissions generated would be offset by that being saved as a result of decreased use of private transport.

# SOCIAL (BARBOUR, 2024)

NOTES IN RELATION TO THE BALBOUR 2024 STUDY AND REPORT:

- There is some overlap between the impacts identified and assessed by the social specialist (Barbour, 2024) and those covered by the socio-economic specialists (Urban-Econ, 2024). For completeness, the assessments of both are included in the BAR.
- The social specialist did not assess alternative 2 (underpass). Instead, he makes reference to the underpass being preferred from a social perspective due to the significant and permanent impact the bridge will have

- on property values. Urban-econ does however consider and assess socio-economic impacts of both alternatives.
- The impact tables and assessment methodology used by Mr Barbour differ to the format of the tables
  contained in the BAR template. Mr Barbour believes that his impact tables are adequate with no need to
  adjust these to align with the BAR template. He further states that his tables have successfully supported
  the decision-making process of other environmental applications in the Western Cape and nationally.

Nature	Provision of safe, affordable, accessible, and efficient public transport		
	Without Enhancement	With enhancement	
Extent	Local – Regional (2)	Local – Regional (3)	
Duration	Long – Term (4)	Long – Term (4)	
Magnitude	High (8)	High (8)	
Probability	Highly Probable (4)	Definite (5)	
Significance	Medium (56)	High (75)	
Status	Positive Positive		
Reversibility	Yes, service removed Yes, service removed		
irreplaceable loss of resources	N/A N/A		
Can impact be enhanced	Yes		
Enhancement	The CCT should ensure that the required management and operational measures are put in place to ensure that the MyCiti operations meet the stated TOD objectives of providing safe, affordable, accessible, and efficient public transport.		
Cumulative impacts	Improve access and mobility, increase disposable income by reducing monthly transport costs for commuters, stimulate economic development		
Assessment on No Go Option	There is no impact as it maintains the current status quo.		

Nature	<ul> <li>Impact on the social fabric of the area, specifically the areas located along South Road.</li> <li>Environmental justice issues.</li> <li>Impacts associated with involuntary resettlement.</li> <li>Impacts associated with the proposed bridge over the railway line.</li> <li>Impacts associated with proposed road closures along South Road.</li> </ul>		
	Without Mitigation	With Mitigation	
Extent	Local – Regional (3)	Local – Regional (2)	
Duration	Permanent (5)	Permanent (5)	
Magnitude	High (8)	Low (4)	
Probability	Definite (5)	Highly Probable (4)	
Significance	High (80) Medium (44)		
Status	Negative	Negative	
Reversibility	Yes, service removed	Yes, service removed	
irreplaceable loss of resources	N/A	N/A	
Can impact be mitigated	Yes		
Mitigation	<ul> <li>Yes</li> <li>Mitigation is a critical component of the EIA process. The mitighierarchy consists of four steps that must be followed in order, name.</li> <li>Avoid or prevent potentially significant impacts.</li> <li>Minimize or reduce potentially significant impacts.</li> <li>Restore impacted areas.,</li> <li>Offset of compensate impacts not addressed fully through above.</li> <li>The most effective mitigation measure to avoid or reduce the impacts associated with W8 would be to identify an alternative of for providing access to the Wynberg CBD. Alternatively, the propose W8 can be amended to address the concerns raised regarding</li> </ul>		

	proposed road closures, and developing an underpass under the railway line, as opposed to the bridge over rail option
	<b>EAP note:</b> It is acknowledged that the visual and social specialists believe that an alternative route should have been considered as part of this Basic Assessment. Additionally, this recommendation/opinion is acknowledged as part of the Heritage Practitioners report. However, as previously mentioned, a thorough route analysis which considered multiple factors, including technical/engineering aspects and property acquisition requirements, informed the most reasonable and feasible route, which was then taken into the environmental investigations.
Cumulative:	None indicated by the specialist
Assessment on No Go Option	There is no impact as it maintains the current status quo.

Nature	The no-development option (no-go alternative) would represent a lost opportunity to implement the CCTs Transit-Oriented Development (TOD) approach to spatial planning and would be contrary to the stated objectives and principles contained in the CCT SDF and IDP.		
	Without Mitigation	With Mitigation	
Extent	Local – Regional (3)	Local-Regional (3)	
Duration	Permanent (5)	Permanent (5)	
Magnitude	High (8)	Moderate (6)	
Probability	Definite (5)	Definite (5)	
Significance	High (80)	High (70)	
Status	Negative	Positive	
Reversibility	Yes		
irreplaceable loss of resources	No		
Can impact be mitigated	Yes		
Enhancement:	Nothing included by the specialist, but the EAP notes that the only realistic mitigation is to implement the development option.		
Cumulative impacts	Negative, linked to lost opportunity for CCT and residents who would benefit from the project.		

# SOCIO-ECONOMIC (URBAN-ECON, 2024)

IMPACT ON PRODUCTION AND GDP DURING THE OPERATIONAL PHASE				
Alternatives	Alternative 1 (Rail Overpass) PREFERRED	Alternative 2 (Rail Underpass)	No-Go Alternative	
Potential impact and risk:	Impact on production and GDP during the operational phase	Impact on production and GDP during the operational phase	Impact on production and GDP during the operational phase	
Nature of impact:	Positive	Positive	Positive	
Extent and duration of impact:	Regional + Permanent	Regional + Permanent	None	
Consequence of impact or risk:	Expenditure associated with the operation of the proposed route once it becomes operational will have a positive impact on GDP. The operational spend on the MyCiTi service on this route will inject transport sales for the local and regional economy.	Expenditure associated with the operation of the proposed route once it becomes operational will have a positive impact on GDP. The operational spend on the MyCiTi service on this route will inject transport sales for the local and regional economy.	None	
Probability of occurrence:	Probable	Probable	None	
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None	
Degree to which the impact can be reversed:	irreversible	irreversible	None	
Indirect impacts:	None	None	None	
Cumulative impact prior to mitigation:	Medium	Medium	None	

Significance rating of impact <u>prior to mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (Positive)	Medium (Positive)	None
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the impact can be managed:	Low	Low	None
Degree to which the impact can be mitigated:	Moderate	Moderate	None
Proposed mitigation:	The operator of the proposed IRT network development should be encouraged to, as far as possible, procure materials, goods and products required for the operation and maintenance of the development from local suppliers to increase the positive impact in the local economy.	The operator of the proposed IRT network development should be encouraged to, as far as possible, procure materials, goods and products required for the operation and maintenance of the development from local suppliers to increase the positive impact in the local economy.	None
Residual impacts:	Long term Economic injection into the local and regional economy.	Long term Economic injection into the local and regional economy.	None
Cumulative impact post mitigation:	Medium	Medium	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (Positive)	Medium-High (Positive)	None

SUSTAINABLE IMPACT ON EMPLOYMENT			
Alternatives	Alternative 1 (Rail Overpass)	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Sustainable impact on employment	Sustainable impact on employment	Sustainable impact on employment
Nature of impact:	Positive	Positive	None
Extent and duration of mpact:	Local - Permanent	Local - Permanent	None
Consequence of impact or risk:	Low	Low	None
Probability of occurrence:	Highly probable	Highly probable	None
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None
Degree to which the impact can be reversed:	Irreversible	Irreversible	None
ndirect impacts:	None	None	None
Cumulative impact prior to mitigation:	None	None	None
Significance rating of impact <u>prior to mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (+)	Low (+)	None
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the mpact can be managed:	Low	Low	None
Degree to which the mpact can be mitigated:	Low	Low	None
Proposed mitigation:	Employing locally offers several advantages that	Employing locally offers several advantages that	None

	extend beyond the immediate job creation. By hiring individuals from the local (Cape Town) community contributes directly to the economic well-being of local households and the surrounding areas.	extend beyond the immediate job creation. By hiring individuals from the local (Cape Town) community contributes directly to the economic well-being of local households and the surrounding areas.	
Residual impacts:	None	None	None
Cumulative impact post mitigation:	Medium	Medium	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (+)	Low (+)	None

Alternatives	Alternative 1 (Rail Overpass)	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Sustainable impact of transport affordability on household income	Sustainable impact of transport affordability on household income	Sustainable impact of transport affordability on household income
Nature of impact:	Positive	Positive	None
Extent and duration of impact:	Regional - Permanent	Regional - Permanent	None
Consequence of impact or risk:	Medium - High	Medium - High	None
Probability of occurrence:	Highly probable	Highly probable	None
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None
Degree to which the impact can be reversed:	irreversible	irreversible	None
Indirect impacts:	N/A	N/A	None
Cumulative impact prior to mitigation:	N/A	N/A	None
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium- High, High, or Very-High)	Medium (+)	Medium (+)	None
Degree to which the impact can be avoided:	Low	Low	None
Degree to which the impact can be managed:	Low	Low	None
Degree to which the impact can be mitigated:	Very Low	Very Low	None
Proposed mitigation:	Increase accessibility to economic hubs in areas such the Wynberg area, especially for lowincome individuals and families facing mobility barriers. Sufficient MyCiTi buses along this route will benefit individuals travelling the route for work, education, and recreational purposes.	Increase accessibility to economic hubs in areas such the Wynberg area, especially for low-income individuals and families facing mobility barriers. Sufficient MyCiTi buses along this route will benefit individuals travelling the route for work, education, and recreational purposes.	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	None	None	None
Significance rating of impact after mitigation (e.g. Low, Medium, Medium- High, High, or Very-High)	Medium (+)	Medium (+)	None

SUSTAINABLE IMPACT ON INCREASED MOBILITY AND ACCESS TO PUBLIC TRANSPORT			
Alternatives	Alternative 1 (Rail Overpass)	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Sustainable impact on increased mobility and access to public transport	Sustainable impact on increased mobility and access to public transport	Sustainable impact on increased mobility and access to public transport
Nature of impact:	Positive	Positive	None
Extent and duration of impact:	Local - Permanent	Local - Permanent	None
Consequence of impact or risk:	Medium	Medium	None
Probability of occurrence:	Definite	Definite	None
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resources	No loss of resources	None
Degree to which the impact can be reversed:	irreversible	irreversible	None
Indirect impacts:	None	None	None
Cumulative impact prior to mitigation:	None	None	None
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (+)	Medium (+)	None
Degree to which the impact can be avoided:	unavoidable	unavoidable	None
Degree to which the impact can be managed:	Low	Low	None
Degree to which the impact can be mitigated:	Moderate	Moderate	None
Proposed mitigation:	Ensure that the IRT network operates efficiently, effectively, and at an affordable cost.	Ensure that the IRT network operates efficiently, effectively, and at an affordable cost.	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	None	None	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium- High (+)	Medium- High (+)	None

SUSTAINABLE IMPACT ON TRAVEL TIME			
Alternatives	Alternative 1 (Rail Overpass)	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Sustainable Impact on travel time	Sustainable Impact on travel time	Sustainable Impact on travel time
Nature of impact:	Positive	Positive	None
Extent and duration of impact:	Regional – Permanent	Regional – Permanent	None
Consequence of impact or risk:	Medium	Medium	None
Probability of occurrence:	Highly probable	Highly probable	None
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resources	No loss of resources	None
Degree to which the impact can be reversed:	Irreversible	Irreversible	None
Indirect impacts:	None	None	None
Cumulative impact prior to mitigation:	None	None	None
Significance rating of impact prior to mitigation	Medium (+)	Medium (+)	None

(e.g. Low, Medium, Medium-High, High, or Very-High)			
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the impact can be managed:	Low	Low	None
Degree to which the impact can be mitigated:	Low	Low	None
Proposed mitigation:	MyCiTi operations should ensure an adequate provision of bus services operating and adherence to departure and arrival times according to IRT operations.	MyCiTi operations should ensure an adequate provision of bus services operating and adherence to departure and arrival times according to IRT operations.	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	None	None	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium- High (+)	Medium- High (+)	None

IMPACT ON ACCESS TO WORK OPPORTUNITIES			
Alternatives	Alternative 1 (Rail Overpass)	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Impact on Access to work opportunities	Impact on Access to work opportunities	Impact on Access to work opportunities
Nature of impact:	Positive	Positive	Positive
Extent and duration of impact:	Regional – Permanent	Regional – Permanent	None
Consequence of impact or risk:	Medium- High	Medium- High	None
Probability of occurrence:	Highly probable	Highly probable	None
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resources	No loss of resources	None
Degree to which the impact can be reversed:	Irreversible	Irreversible	None
Indirect impacts:	None	None	None
Cumulative impact prior to mitigation:	None	None	None
Significance rating of impact <u>prior to mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (+)	Medium-High (+)	None
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the impact can be managed:	None	None	None
Degree to which the impact can be mitigated:	None	None	None
Proposed mitigation:	No mitigation measures envisioned	No mitigation measures envisioned	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	Medium-High (+)	Medium-High (+)	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-High (+)	Medium-High (+)	None

# SUSTAINABLE IMPACT ON TRAFFIC CONGESTION

Alternatives	Alternative 1 (Rail Overpass)	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Sustainable impact on traffic congestion	Sustainable impact on traffic congestion	None
Nature of impact:	Positive	Positive	None
Extent and duration of impact:	Local -Permanent	Local -Permanent	None
Consequence of impact or risk:	High	High	None
Probability of occurrence:	probable	probable	None
Degree to which the impact may cause irreplaceable loss of resources:	No loss	No loss	None
Degree to which the impact can be reversed:	Irreversible	Irreversible	None
Indirect impacts:	None	None	None
Cumulative impact prior to mitigation:	Low	Low	None
Significance rating of impact <u>prior to mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (+)	Medium (+)	None
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the impact can be managed:	Medium	Medium	None
Degree to which the impact can be mitigated:	Medium	Medium	None
Proposed mitigation:	- Regular monitoring of traffic patterns and congestion levels to identify any emerging issues.	Regular monitoring of traffic patterns and congestion levels to identify any emerging issues.	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	Low	Low	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (+)	Medium (+)	None

SUSTAINABLE IMPACT ON ACCESS TO EDUCATION, RECREATIONAL AND HEALTH FACILITIES			
Alternatives	Alternative 1 (Rail Overpass)	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Sustainable Impact on access to education, recreational and health facilities	Sustainable Impact on access to education, recreational and health facilities	Sustainable Impact on access to education, recreational and health facilities
Nature of impact:	Positive	Positive	None
Extent and duration of impact:	Regional - Permanent	Regional - Permanent	None
Consequence of impact or risk:	Medium	Medium	None
Probability of occurrence:	Highly probable	Highly probable	None
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None
Degree to which the impact can be reversed:	Irreversible	Irreversible	None
Indirect impacts:	None	None	None
Cumulative impact prior to mitigation:	N/A	N/A	None
Significance rating of impact prior to mitigation	Medium-High (+)	Medium-High (+)	None

(e.g. Low, Medium, Medium-High, High, or Very-High)			
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	None
Degree to which the impact can be managed:	Medium	Medium	None
Degree to which the impact can be mitigated:	None	None	None
Proposed mitigation:	None	None	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	None	None	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	High (+)	High (+)	None

IMPACT ON ENHANCEMENT OF WYNBERG AS A COMMERCIAL NODE			
Alternatives	Alternative 1 (Rail Overpass)	Alternative 2 (Rail Underpass)	No-Go Alternative
Potential impact and risk:	Impact on Enhancement of Wynberg as a commercial node	Impact on Enhancement of Wynberg as a commercial node	Impact on Enhancement of Wynberg as a commercial node
Nature of impact:	Positive	Positive	None
Extent and duration of impact:	Regional – Permanent	Regional – Permanent	None
Consequence of impact or risk:	High	High	None
Probability of occurrence:	Highly probable	Highly probable	None
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	None
Degree to which the impact can be reversed:	irreversible	irreversible	None
Indirect impacts:	None	None	None
Cumulative impact prior to mitigation:	Low	Low	None
Significance rating of impact <u>prior to mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (+)	Medium (+)	None
Degree to which the impact can be avoided:	Low	Low	None
Degree to which the impact can be managed:	Moderate	Moderate	None
Degree to which the impact can be mitigated:	Moderate	Moderate	None
Proposed mitigation:	Improving pedestrian infrastructure: by enhancing sidewalks, crosswalks, signal and lighting in the Wynberg area to promote safe and convenient walking and reduce care reliance.	Improving pedestrian infrastructure: by enhancing sidewalks, crosswalks, signal and lighting in the Wynberg area to promote safe and convenient walking and reduce care reliance.	None
Residual impacts:	None	None	None
Cumulative impact post mitigation:	Low	Low	None
Significance rating of impact <u>after mitigation</u> (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High (+)	Medium – High (+)	None

# VISUAL (GIBBS, 2024)

Note: the visual specialist assessed an earlier version of the overpass design as a separate alternative. This is no longer relevant and was excluded from the below table.

Alternatives	ALTERNATIVE 1 (OVERPASS) PREFERRED	ALTERNATIVE 2 (UNDERPASS)	NO-GO ALTERNATIVE
OPERATIONAL			
Potential impact and risk:	Some visual intrusion into urban cultural landscape environment	Some visual intrusion into urban cultural landscape environment	Continuation of status quo
Nature of impact:	Negative. Possible encroachment on visual resources. Underpass less impactful than overpass. Direct Impact: Massive infrastructure, disruption of urban fabric, loss of urban green spaces.	Negative. Possible encroachment on visual resources. Underpass less impactful than overpass. Direct Impact: Massive infrastructure, disruption of urban fabric, loss of urban green spaces.	Neutral.  'No development' less impactful than development
Extent and duration of impact:	Local, permanent	Local, permanent	Local, short term
Consequence of impact or risk:	Insertion of new overpass providing increased mobility through the area	Insertion of new underpass providing increased mobility through the area	N/A
Probability of occurrence:	Definite	Definite	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium/High	Medium/High	Low
Degree to which the impact can be reversed:	Low	Low	Low
Indirect impacts:	Increased activities associated with higher order movement route	Increased activities associated with higher order movement route	N/A
Cumulative impact prior to mitigation:	Adds to existing development within the context	Adds to existing development within the context	N/A
Significance rating of impact prior to mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	Very High (-)	High (-)	Neutral (0)
Degree to which the impact can be avoided:	Low	Low	Medium
Degree to which the impact can be managed:	Low/Medium	Low/Medium	High
Degree to which the impact can be mitigated:	Low/Medium	Low/Medium	High
Proposed mitigation:	<ul> <li>Identify alternative routes and establish 'no-go areas' for any further infrastructure.</li> <li>Planning of development to respond positively to visual considerations.</li> <li>Architectural measures (form / scale / massing / materials / textures)</li> <li>Landscape measures (screen</li> </ul>	<ul> <li>Identify alternative routes and establish 'no-go areas' for any further infrastructure.</li> <li>Planning of development to respond positively to visual considerations.</li> <li>Architectural measures (form / scale / massing / materials / textures)</li> <li>Landscape measures (screen</li> </ul>	<ul> <li>Planning of development to respond to visual considerations.</li> <li>Architectural measures (form/scale/massing/materials/textures)</li> <li>landscape measures (screen planting / view corridors)</li> </ul>

	planting / internal	planting / internal	
	open space / view corridors)	open space / view corridors)	
	Comdois	Comdoisj	
	EAP note: It is acknowledged that the visual and social specialists believe that an alternative route should have been considered as part of this Basic Assessment. Additionally, this recommendation/opinion is acknowledged as part of the Heritage	EAP note: It is acknowledged that the visual and social specialists believe that an alternative route should have been considered as part of this Basic Assessment. Additionally, this recommendation/opinion is acknowledged as part of the Heritage	
	Practitioners report. However, as previously mentioned, a thorough route analysis which considered multiple	Practitioners report. However, as previously mentioned, a thorough route analysis which considered multiple	
	factors, including technical/engineering aspects and property acquisition requirements, informed the most	factors, including technical/engineering aspects and property acquisition requirements, informed the most	
	reasonable and feasible route, which was then taken into the environmental investigations.	reasonable and feasible route, which was then taken into the environmental investigations.	
Residual impacts:	Development which partially fits in with the local urban landscape	Development which partially fits in with the local urban landscape	N/A
Cumulative impact post mitigation:	Neutral due to congruence with context and retention of notable site features	Neutral due to congruence with context and retention of notable site features	Neutral
Significance rating of impact after mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	High (-)	Moderate (-)	Neutral (0)

NOISE (SOUNDSCAPE, 2025)

NOISE IMPACTS			
Alternatives:	ALTERNATIVE 1 (PREFERRED)	ALTERNATIVE 2	NO-GO ALTERNATIVE
Potential impact and risk:	<ul> <li>Road traffic causes noise. The expansion of the road will result in traffic growth.</li> <li>Noise from traffic will increase ambient noise levels currently experienced.</li> <li>Increased noise levels may impact neighbouring residents by causing nuisance and disturbance.</li> <li>Some properties are as close as 10 m from the curb.</li> </ul>	<ul> <li>Road traffic causes noise. The expansion of the road will result in traffic growth.</li> <li>Noise from traffic will increase ambient noise levels currently experienced.</li> <li>Increased noise levels may impact neighbouring residents by causing nuisance and disturbance.</li> <li>Some properties are as close as 10</li> </ul>	Residents along sections of current South Road alignment are already exposed to noise levels above CCT determined rating level for such districts.  This noise impact will remain unchanged.

Residual impacts:	Noise nuisance will remain.	
Cumulative impact post mitigation:	Medium-High (-)	
Significance rating of impact after mitigation (e.g., Low, Medium, Medium-High, High, or Very-High)	Medium-High (-)	

# **DECOMMISSIONING PHASE**

It is not the intention of the Applicant to decommission the proposed development as it would provide permanent connectivity within the greater road network system.

# SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1. Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.

# KEY FINDINGS OF AQUATIC BIODIVERSITY COMPLIANCE STATEMENT (NCC, 2023b)

The screening of the site using the National Web-based Environmental Screening Tool indicates a Very High aquatic biodiversity theme, which was verified by a site sensitivity inspection conducted by NCC Environmental Services in August 2023. The site is situated within the Table Mountain National Strategic Water Source Area (SWSA) for surface water and falls under the Berg-Olifants Water Management Area (WMA) in quaternary catchment G22D. No natural surface water resources are present within or traverse the site footprint, and there are no fish support areas, fish sanctuaries, fish translocation areas, fish migration corridors, fish rehabilitation areas, wetland clusters, high water yield areas, or free-flowing rivers on the site.

The site itself is highly transformed and modified, with limited ecological connectivity to other surface water resources. Consequently, the proposed development is not expected to significantly impact aquatic biodiversity, including endangered or critically endangered species.

In their assessment, NCC (2023b) concluded that the sensitivity of aquatic biodiversity at the site is **Low**, indicating that the proposed route will not result in significant negative impacts or losses to aquatic biodiversity. This conclusion is attributed to the current transitional and transformed state of the area, as well as the absence of nearby surface water resources. As a result, no specific interventions for managing impacts on aquatic biodiversity are deemed necessary. NCC (2023b) has expressed support for proceeding with the project based on these findings.

Recommended mitigation measures are provided in **Section 12** and detailed in the Environmental Management Programme (EMPr) in **Appendix H**.

# Influence on proposed development

The study has found no sensitivities or development constraints on site to the preferred Alternative.

As a result, only general mitigation measures have been provided by the specialist (see list in the following section) and have been included in the EMPr (refer to **Appendix H**).

# KEY FINDINGS OF TERRESTRIAL BIODIVERSITY COMPLIANCE STATEMENT (NCC, 2023a)

The screening using the National Web-based Environmental Screening Tool indicates a Very High terrestrial biodiversity theme, verified as **Low** through a site sensitivity inspection by NCC Environmental Services in August 2023.

The proposed site does not fall within CBA, ESA, or other designated conservation areas according to biodiversity objectives. It also does not overlap with Protected Areas defined by NEMA, Cape Nature, or SANBI. Historically, the site was occupied by Cape Flats Sand Fynbos, a critically endangered vegetation type unique to Cape Town. However, a ground truth exercise confirmed significant disturbance and advanced degradation of greenery on the site slated for development, transitioning from native to non-native vegetation cover and lacking indigenous plant communities (NCC, 2023a).

The site's highly transformed state, compounded by negative ecological drivers such as fragmentation, trampling, and ruderal weed proliferation, has suppressed native vegetation regeneration. Intentional landscaping efforts have introduced both indigenous and exotic species, further altering the habitat dynamics (NCC, 2023a).

Given these conditions, no plant species of conservation concern are likely present or capable of surviving on the site. Similarly, the habitat quality does not support the presence or survival of faunal species of conservation concern, due to factors including habitat degradation and the absence of essential ecological drivers like fire, forage, shelter, and wildlife corridors (NCC, 2023a).

Conclusively, the site is deemed to have 'Low' sensitivity for terrestrial biodiversity and hence, the specialist supports the proposed development.

Recommended mitigation and remedial measures are provided in **Section 12** and detailed in the Environmental Management Programme (EMPr) in **Appendix H**.

### Influence on proposed development

The study has found no sensitivities or development constraints on site to the preferred Alternative.

As a result, only general mitigation measures have been provided by the specialist (see list in the following section) and have been included in the EMPr (refer to **Appendix H**).

# KEY FINDINGS OF THE VISUAL IMPACT ASSESSMENT (GIBBS, 2024)

Upon an investigation of the visual impact of the proposed development, Gibbs (2024) determined that it will have both direct and indirect effects on the site and the local area, significantly altering the urban fabric and character of South Road. The demolition of existing buildings will further erode the urban fabric, and the introduction of the rail overpass bridge will intrude visually and overshadow adjacent properties. Additionally, the closure of several neighbourhood streets will disrupt the north-south continuity of the neighbourhoods and divide Wynberg / Wittebome from Plumstead.

The site is located in an area of moderate to high scenic, cultural, and historical significance, featuring valued characteristics such as mountain views, community facilities like churches and schools, and numerous heritage buildings (Gibbs, 2024). The surrounding environment is recognized for its urban residential character and strong sense of place, with moderate to high visual amenity. However, parts of the site have low visual and landscape amenity due to the demolition of buildings.

While the urban design report suggests mitigation measures through various urban landscape interventions, these will fundamentally transform South Road. The street will shift from a relatively quiet residential area with an intact streetscape on the northern edge and informal open space on the southern edge into a high-capacity "complete street" with increased cross-sectional area, additional lanes, and higher traffic volumes and speeds.

The landscape character of the local context is considered highly sensitive, due to its proximity to the proposed development. The properties immediately adjacent will be most severely impacted by the visual intrusion of large-scale traffic infrastructure, particularly the rail-overpass bridge, as well as the disruption to the continuity of neighbouring areas (Wynberg / Wittebome and Plumstead).

Although the proposed development aims to improve metropolitan-scale connectivity between the metro-south and Wynberg, it comes at the cost of local-scale disconnection and displacement. Beyond the visual and spatial disruptions, additional negative impacts include increased noise and air pollution due to higher traffic flows. Given the scale and significance of these impacts, a meaningful exploration of alternative routes will be necessary, as mitigation alone is unlikely to reduce the adverse effects to an acceptable level.

### Impacts upon the Regional Context:

• Where perceived from the site and immediate adjacencies, the proposal is likely to impact upon background views of the geographic landmark features by intruding into the foreground and obscuring the mountain background.

## Impacts upon the Local Context:

• Visual disruption to the urban fabric and visual intrusion of large-scale traffic infrastructure (most notably the rail-overpass bridge), with disruption to the continuity of adjacent neighbourhoods (Wynberg / Wittebome and Plumstead) by limiting north-south connectivity.

# Impacts upon the Site Attributes:

 Demolition of existing buildings (including some Grade 3 heritage resources) as well as local landmarks (such as 'Mallow' at the western / Main Road interface, and Abdullah's Food centre at the eastern portion; the removal of some mature trees, the visual intrusion of the rail overpass bridge, with columns, ramps, stairs overshadowing adjacent properties; the impact of noise and air pollution as a result of additional traffic reducing the environmental and spatial quality of the adjacent properties.

In the case of the proposed development, these cumulative effects could significantly alter the character and functionality of the local area. One major concern is the increase in traffic speed and volume, which will likely compromise pedestrian safety, particularly for school children walking to and from the numerous schools in the vicinity. The intensified traffic flow may also introduce higher levels of noise and air pollution, further degrading the residential environment. Beyond the immediate traffic-related concerns, the scale of the proposed infrastructure is more aligned with commercial or even light industrial land uses. This could catalyze further shifts in the area's land use, leading to the gradual displacement of the residential fabric. Over time, this process of intensification may erode the neighbourhood's existing sense of place, transforming it from a relatively quiet, residential environment into a more commercialized and high-traffic corridor.

Gibbs (2024) further notes that the negative impacts of the proposed development include the imposition of massive infrastructure upon a quiet residential street, the disruption of the urban fabric, and the loss of urban green spaces. Even though the specialist noted that the implementation of the proposed landscape response and urban design interventions as mitigation, may produce positive impacts in terms of urban placemaking, the proposed project is not supported.

Recommended implementable mitigation and remedial measures are provided in **Section 12** and detailed in the Environmental Management Programme (EMPr) in **Appendix H**.

# Influence on proposed development

The findings of the specialist were included in the BAR. As consideration of an alternative route is one of the key recommendations from this study, the only influence on the project was inclusion of the implementable recommendations into the EMPr.

Additionally, the proposal in the BAR focuses on retaining mature trees, adding new street tree planting, and prioritizing pedestrian movement. Lighting will be designed to minimize light pollution. During construction, tree clusters will be protected, activity limited to disturbed areas, and a EMPr will be compiled to manage environmental impacts like dust and erosion. The operational phase will address noise, and safety through appropriate materials, lighting, and signage. A detailed landscape plan will manage vegetation, planting, and landscaping to ensure integration with the environment and mitigate visual impacts.

# KEY FINDINGS OF THE SOCIAL IMPACT ASSESSMENT (BARBOUR, 2024)

A review of the Western Cape Provincial Spatial Development Framework, the City of Cape Town Spatial Development Framework and Integrated Development Plan, as well as the Southern District Plan, confirms that the proposed development aligns with and is supported by the relevant policy and land use planning frameworks applicable to the study area (Barbour, 2024). The CCT SDF and IDP emphasize the critical role of transit-oriented development and the establishment of an efficient, integrated public transport system in fostering a more inclusive and cohesive urban environment (Barbour, 2024). These frameworks seek to redress historical spatial inequalities, rectify imbalances in residential distribution, and prevent the emergence

of new structural disparities in service provision (Barbour, 2024). Accordingly, the development of proposed project is supported from a policy and planning perspective (Barbour, 2024). Regardless, as outlined in Barbour (2024), the current proposals are not supported due to their significant social impacts.

# **Construction Phase**

The specialist found that social benefits of the construction phase, including business and employment opportunities, are not exclusive to the proposed development and would apply to any alternative route. While these benefits contribute to local economic growth and skills development, they must be carefully considered alongside the potential social and environmental impacts of the selected alignment.

#### Positive Impacts

The project, with an estimated capital expenditure of approximately R550 million (2023 values), presents a significant economic opportunity for the local construction and building sector. The majority of construction work will be undertaken by local contractors, and building materials will be sourced from local suppliers, injecting substantial capital into the local economy.

The construction phase of the project is expected to span two years, generating approximately 300 employment opportunities. Of these, 45% (135) will be allocated to low-skilled workers, 40% (120) to semi-skilled workers, and 15% (45) to high-skilled workers. The total wage bill over this period is estimated at R88 million (2023 values), with the majority of earnings circulating within the local City of Cape Town economy, thereby benefiting local businesses.

A significant portion of these employment opportunities is likely to benefit Historically Disadvantaged (HD) members of the community, providing a substantial boost to the local workforce and construction sector. Given the current economic climate in South Africa and the lingering effects of the COVID-19 pandemic, the project represents an important economic stimulus for both the construction industry and the broader community.

### Negative Impacts

The potential negative impacts during the construction phase of the W8 project include the following:

- Impacts related to the presence of construction workers on-site, which may affect local communities and residents.
- Security and safety risks associated with the influx of workers and construction activities.
- Noise, dust, and safety concerns resulting from construction-related activities, as well as the movement of heavy vehicles within the area.

These negative impacts are not unique to the proposed alignment but are expected to be more pronounced due to the project's location in an established, quiet residential area. The impact in this setting is likely to be greater compared to an alternative alignment, making mitigation measures more critical.

## **Operational Phase**

The key social issues associated with the operational phase of the W8 project are as follows:

# Potential Positive Impacts:

The project will contribute to the provision of safe, efficient, and affordable public transport, linking the Cape Flats to the Wynberg CBD and surrounding areas. However, the potential benefits need to be evaluated in the context of the negative social impacts associated with the proposed alignment along South and Waterbury Roads, particularly in a quiet, integrated residential area. As such, the proposed alignment for proposed development is not supported by Barbour (2024).

# Potential Negative Impacts:

- Social Fabric Impact: The establishment of W8 along South and Waterbury Roads will disrupt the social cohesion of the area, particularly in communities situated along South Road.
- Environmental Justice Issues: The project raises concerns regarding the fair distribution of the negative effects on vulnerable communities.
- Involuntary Resettlement: The development could result in the displacement of residents due to the required changes to the built environment.
- Impacts of the Proposed Bridge: The bridge over the railway line will contribute to significant visual, noise, and privacy disruptions.
- Road Closures: The proposed closures along South Road will further exacerbate accessibility issues.

All these negative impacts are interconnected, resulting from the establishment of a major transportation route through an established, quiet, integrated residential area. The designation of South Road as a road reserve does not mitigate these potential consequences (Barbour, 2024). Barbour (2024) notes the current proposals for the proposed development, particularly the overrail bridge and proposed road closures, are not supported.

# Influence on proposed development

The findings of the specialist were included in the BAR. As consideration of an alternative route is the key recommendation from this study, the only influence on the project was inclusion of the implementable recommendations into the EMPr.

#### KEY FINDINGS OF THE SOCIO-ECONOMIC IMPACT ASSESSMENT (URBAN-ECON, 2024)

A social-economic impact assessment was conducted by Urban-Econ (2024) to determine and assess the potential socioeconomic impacts of the proposed development activities. Urban-Econ (2024) states that the proposed development of the Phase 2 IRT (W8) network is supported by several national, provincial, and local policy documents. The development has the potential to impact the community by increasing access to economic opportunities. The proposed route upgrades will have significant positive and negative impacts during the construction and operational phases.

During the construction phase, the largest negative impacts will be on traffic flows as large trucks and machinery move to and from the site (Urban-Econ, 2024). The positive impacts will lead to an increase in GDP for the local economy of the City of Cape Town through heightened business output and production (Urban-Econ, 2024).

Residents of the Mitchell's Plain and Khayelitsha areas will have access to efficient public transportation, which will enhance mobility and job prospects in the bustling commercial centres of the southern region. Furthermore, there will be enhanced accessibility to recreational facilities situated in and around the Southern region, alongside the revitalisation of the Wynberg area through proposed infrastructure development.

The positive impacts during operations are therefore likely to include increased accessibility to public transport, leading to enhanced mobility for community members. Urban-Econ (2024) states that a reduction in the number of vehicles on the roads is expected, which will potentially reduce traffic congestion. Moreover, it was discovered that take-home wages and salaries are projected to increase due to the affordability of the MyCiTi bus system compared to other modes of private and public transportation. This would increase the disposable income of households living in those far-out communities such as the Khayelitsha and Mitchell's Plain areas (Urban-Econ, 2024).

The specialist concluded that the net positive economic impacts associated with the development and operation of the proposed development are expected to outweigh the net negative effects (Urban-Econ, 2024). The Project is also envisaged to have a positive stimulus on the local economy and employment creation. The benefits to the wider community because of the project in terms of increased public transport choices, decreased travel time, reduced congestion, and opportunities for infrastructure development around identified area is expected to outweigh the directly impacted households that will have to relocate from their current communities (Urban-Econ, 2024). As such, the specialist supports the project.

#### Influence on proposed development

Recommendations to limit negative and enhance positive impacts were included in the EMPr.

# KEY FINDINGS OF THE HERITAGE IMPACT ASSESSMENT (O'DONOGUE, 2024)

O'Donoghue (2024) identified several heritage resources within the project site, including Wynberg East, individual buildings, mature trees, and the space between Wynberg East and Plumstead, which was historically designed as a buffer zone. The road infrastructure proposals, particularly the expansion of South Road, are likely to have significant negative impacts on the townscape, buildings, and the sense of place in the area.

Key vulnerabilities identified include the fine-grain urban environment in Wynberg East, with its proximity to South Road, lack of vegetation, and the risk of the road's expansion negatively affecting the area's aesthetic and historic value. The proposed elevated road infrastructure and overpass are expected to impact the surrounding buildings and visual qualities, with the potential for disrupting the historic townscape and urban fabric, as observed in other Cape Town areas. Non-motorized transport (NMT) routes and landscaping, including mature trees, are essential for preserving the area's aesthetics and heritage value.

The HIA recommends revising the proposed road and landscape designs to mitigate their negative impacts on the heritage resources and townscape. Enhancing spatial integration between Wynberg East and Plumstead, improving NMT routes, and ensuring better integration with historic buildings are key steps for mitigating the impacts. The introduction of prominent gateways and the development of remaining land along the route should be considered to support local character and urban renewal. Additionally, the HIA suggests exploring alternatives to the proposed overpass bridge, which could reduce visual and spatial disruptions. Public art and interpretive signage should be implemented in collaboration with the relevant City of Cape Town departments.

The HIA recommends the following to HWC for approval:

- The HIA accepted by HWC as it meets the requirements of NHRA Section 38(3);
- The recommendations contained in Section 15.2 of the HIA are approved by HWC and the proposed road infrastructure is recommended for revision to address the Urban Design, Visual and Social recommendations;
- Approve the demolitions of the partial or full structures on the site as contained in the HIA;
- HWC provides a negative comment to DEA&DP for the application due to the assessed high negative impacts on the townscape, visual and social environments, unless the application is revised and resubmitted to HWC for an assessment;
- The CCT commits to inform the relevant CCT Directorates of the potential to develop the identified remaining land;
- The CCT Arts and Culture and/or Environment and Heritage Management Branch work on the implementation of public art and interpretive signage within the project area.
- The DEA&DP ROD to include the archaeological requirements.

Recommended implementable mitigation and remedial measures are provided in **Section 12** and detailed in the Environmental Management Programme (EMPr) in **Appendix H**.

#### Influence on proposed development

The findings of the specialist were included in the BAR. As consideration of an alternative route and investigation of an alternative to the overpass are the key recommendations from this study, the only influence on the project was inclusion of the implementable recommendations into the EMPr.

# KEY FINDINGS OF THE NOISE IMPACT ASSESSMENT (SOUNDSCAPE, 2025)

Soundscape (2025) recorded the key findings for the construction and operational phases as follows:

#### Construction phase:

- Noise levels of between 52 and 95 dBA can be expected at 10 m from construction/demolition activities (with an
  average and median of 83 and 8 dBA respectively). It is dependent on the specific activity, equipment involved, and
  duration
- There are several instances of receptors being as close as 10 m from either existing structures that will be demolished, or the proposed alignment.
- It is likely that instances of disturbing noise may be experienced by most of the abutting receptors during the construction phase of the project.
- Construction and demolition noise, characterised by its intermittent, unpredictable patterns and higher frequency content, significantly differs from the constant drone of traffic noise, leading to increased annoyance and disruption for nearby receptors.

# Operational phase:

- The CCT classified the area in terms of SANS 10103 as an "urban district with one or more of the following: main roads, business premises, and workshops" with desired day and night-time rating levels of 60 dBA and 50 dBA respectively.
- A significant portion of receptors directly adjacent the current alignment (daytime 63%, night-time 56%) already
  experiences outdoor noise levels above the desired rating levels.
- SANS 10103 recommends acoustic treatment for residential buildings in areas where outdoor noise levels exceed 55 dBA. This underscores the extent of noise impacts given that current noise levels around South Road are already at or above this threshold.
- With the proposed re-alignment and projected traffic for 2040, 65% and 60% of receptors will be exposed to day- and night-time levels above 65 dBA and 55 dBA respectively, which are typically found in central business districts. The highest noise levels occur along the easternmost extent of South Road where the road widens, and receptors are within 10 m from the edge of outer traffic lanes.
- Outdoor daytime rating levels at Wynberg Crèche and Douglas Road Primary are currently between 60 and 65 dBA. These levels can be expected to increase to 71.4 and 67 dBA respectively in 2040.
- The contribution of MyCiti Bus traffic to total day and night-time rating levels is small (less than 1.7 dBA).
- The effectiveness of the noise control barriers on the overpass is evident.
- A substantial proportion of receptors adjacent to the current alignment as well as the proposed alignment (specifically
  the eastern portion after the overpass) will be exposed to noise levels considered disturbing.
- According to SANS 10103, a 7 dBA increase may elicit little to medium community response, potentially resulting in sporadic to widespread complaints from affected residents.
- When assessed against current noise levels rather than desired levels, the impact is less severe but still significant.
- It's important to note that this increase in noise levels will occur gradually over time, corresponding to the yearly growth in traffic volumes.

The 1.5-meter-high concrete parapet, which is both highly reflective and somewhat absorptive, effectively reduces road traffic noise along the overpass. The addition of an acoustic barrier atop the parapet does not provide a substantial improvement in noise reduction. On balance, the noise specialist supports the proposed development.

## Influence on the proposal:

Implementable noise impact recommendations were included in the design and EMPr.

# **KEY FINDINGS OF THE TRAFFIC STUDY**

The main findings from the traffic study are summarised as follows:

- The slip lane at the eastern approach of the Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection was replaced with an exclusive left-turn lane.
- The Pluto Road (southern) leg of the South Road / Kent Road / Pluto Road intersection was closed.
- Access opportunities proposed for the southern region include a left-in left-out access at the South Road intersection with Chudleigh Road and a left-in access at the South Road intersection with Milford Road.
- The flows previously redistributed to Pluto Road have been redistributed to the available access opportunities.
- Several lane configurations and median island widths were amended.
- The proposed sidewalks and pedestrian crossings were amended as per CCT NMT standards.

 Continuous Class 2 cycle lanes are proposed along South Road between Main Road and Rosmead Avenue / Prince George Drive.

### Capacity Analysis Results

- The future (2040), South Road / Main Road intersection will operate at a low level of service (LOSE), indicating low delays, in the weekday AM and PM peak hours.
- In the future (2040), the dedicated bus lane approaches at South Road / Main Road intersection will operate at an acceptable level of service (LOS D) in the AM and PM peak hours.
- The future (2040), South Road / Kent Road intersection will operate at an acceptable level of service (LOS D) during the AM peak hour and at reasonable level of service (LOS C) in the PM peak hour.
- In the future (2040), the dedicated trunk service bus lane approaches at the South Road / Kent Road intersection will operate at a high level of service (LOS A/B), indicating very low delays, in the AM and PM peak hours.
- The future (2040) Rosmead Avenue / Ottery Road intersection will operate at a high level of service (LOS B), indicating low delays, in the AM and PM peak hours.
- In the future (2040), Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection will operate at a low level of service (LOS E) in the AM peak hour and at an acceptable level of service (LOS C) in the PM peak hour.
- In the future (2040), the dedicated BRT lane approaches at the Ottery Road / South Road / Rosmead Avenue / Prince George Drive intersection will operate at a reasonable level of service (LOS C) in the AM and PM peak hours.
- In the future (2040), the short queue jump southbound left turn bus lane will operate at a reasonable level of service (LOS C) in the AM peak hour and at an acceptable level of service LOS D in the PM peak hour.
- The queue lengths between the two closely spaced intersections i.e., north approach of the South Road / Romead Avenue / Prince George Drive intersection and south approach of the Rosmead Avenue / Ottery Road intersection, will not exceed the 60m storage length in the (2040) AM and PM peak hours.

### **Access Management**

The proposed South Road / Chudleigh Road LILO access meets the minimum access spacing requirements.

#### **Parking**

There is currently no formal parking provided along South Road. However additional parking areas is proposed as part of the Work Package W8 design.

## Influence on the proposal

The traffic study's findings influence the proposal response in the BAR by addressing necessary road modifications, access changes, and infrastructure enhancements to ensure efficient traffic flow and accommodate future growth. The proposal incorporates new left-in, left-out accesses, replaces a slip lane with a left-turn lane, and redistributes traffic to improve circulation. The future traffic conditions (2040) were considered, highlighting the need to address congestion at certain intersections while maintaining acceptable service levels at others. The proposal also includes improvements for non-motorized transport (e.g., cycle lanes, sidewalks) and formal parking provision as part of the design, ensuring the development supports both vehicular and pedestrian needs.

## LANDSCAPING PLAN - Refer to Appendix N

Landscaping will enhance the development and would entail a combination of planting of indigenous grasses, trees and groundcovers along the road and within medians where space permits. Where possible, existing trees would be retained. Hard landscaping would include paving and seating. In more high traffic areas, there would be a combination of pedestrian crossings (i.e., informal, painted). Irrigation would be incorporated into the landscape design, as required.

## Influence on the proposal

The landscaping strategy is included as part of the proposed development in order to uplift the aesthetics of the area. The inclusion of indigenous, water-wise, low maintenance plants would provide for a more sustainable project. The EMPr includes the landscaping as part of the design considerations, and measures such as the waterwise and indigenous plants are included in the design specifications of the EMPr.

2. List the impact management measures that were identified by all Specialist that will be included in the EMPr

# RECOMMENDED MITIGATION MEASURES TO MANAGE POTENTIAL AQUATIC BIODIVERSITY IMPACT AS IDENTIFIED BY NCC (2023b)

No specific mitigation measures have been recommended in terms of managing the loss of aquatic biodiversity (both flora and fauna). However, generic impact management actions include:

## **Construction Phase**

- Manage and remove invasive alien plants at any disturbed or spoil areas.
- Stormwater management:
  - Appropriate stormwater infrastructure is to be installed to dissipate flow and direct stormwater away from concentrated paths.

- Drip trays are to be used under vehicles/machinery and that impervious floor surfaces are constructed to
  ensure chemicals and waste do not enter into the soil sub-surface.
- Where practical, install energy dissipation structures in stormwater drains around the built IRT infrastructure, including gabions (hard, traditional engineered solutions) in conjunction with planting of appropriate vegetation species (soft, bio-engineered solutions).

## Spill control:

- o Drip trays are to be used under vehicles/machinery and erosion control measures are implemented.
- o Drip trays or containment measures must be placed under equipment that poses a risk when not in use.
- A spill contingency plan must be put into place.
- All fuel, oil or chemical spills must be recorded and reported to the ECO/Site Agent/Employers Agent to ensure appropriate clean up measures are implemented.
- o All spills must be completely remediated and removed from site to a licensed waste disposal facility.
- Stormwater management measures must be implemented to ensure appropriate water-diversion and erosion control mechanisms are put into place.
- o Spill kits must be available on site for clean-up of spills and leaks.
- o Infrastructure for the storage of chemicals should be lined and bunded appropriately with the capacity to contain 120% of the total amount of chemicals stored.

### Waste Management

- o Disposal of rubble, spoil, litter or waste into the stormwater drains, gutter and canals is strictly prohibited.
- o All litter and waste must be managed appropriately and removed offsite.
- o Chemical ablutions are to be regularly serviced with a disposal/maintenance register kept on site.

## **Operational Phase**

- Stormwater management:
  - Manage and remove invasive alien plants.
  - Undertake regular inspections of the stormwater system, especially after rainfall season, to determine maintenance and repair requirements.
  - o Undertake routine maintenance and repairs of the stormwater system, as required.

## RECOMMENDED MITIGATION MEASURES TO MANAGE POTENTIAL TERRESTRIAL BIODIVERSITY IMPACT AS IDENTIFIED BY NCC (2023a)

No specific mitigation measures are suggested in terms of managing terrestrial biodiversity species loss. However, generic impact management actions include:

- The site must be kept clear of NEMBA listed invasive alien plant species as per the regulations, National Environmental Management: Biodiversity Act (Act 10 of 2004) and its Regulations (Alien and Invasive Species Regulations, 2014).
- Standard SHERQ site 'housekeeping' etiquette to be maintained
  - No disposal of waste runoff into gutters.
  - o All litter to be removed off site.
  - o Chemical ablutions are to be regularly serviced with a disposal/maintenance register kept on site.
  - o Chemical toilets to be secured to the ground.

## RECOMMENDED MITIGATION MEASURES TO MANAGE POTENTIAL ARCHAEOLOGICAL IMPACT AS IDENTIFIED BY O'DONOGUE (2024)

Based on current knowledge, there are no obvious concerns from an archaeological point of view, but the following recommendations should be included in the approval for the project:

- Project staff should be alerted to the possibility of finding buried archaeology (stone or brick walling, or dense concentrations of historical material); and
- If any archaeological material or human burials are uncovered during the course of development then work in the immediate area should be halted. The find would need to be reported to the heritage authorities and may require inspection by an archaeologist. Such heritage is the property of the state and may require excavation and curation in an approved institution.

## RECOMMENDED MITIGATION MEASURES TO MANAGE POTENTIAL HERITAGE IMPACT AS IDENTIFIED BY O'DONOGUE (2024)

The following heritage design indicators have been noted within the Heritage Impact Assessment:

# **HERITAGE DESIGN INDICATORS**

The following heritage design indicators by O'Donoghue (2024) are derived from an assessment of the townscape (character, sense of place, landmarks, gateways), streetscapes, identified heritage resources and the built environment in addition to mature vegetation on the road reserves.

## Enhance Townscape and Heritage Resources

- Enhance (rather than negatively impact) the townscape and heritage resources in the design of the route alignment, design of the areas abutting the route, in order to enhance the experience of the route for the users;
- Design a people centred streetscape;
- Design the future use of open areas abutting the route;
- Minimise the width of the road required in the route i.e. do not maximise the width unless required.

- Reduce the demolition of culturally significant buildings to a minimum as to reduce the negative impacts to the residential precinct:
- Reduce the spatial separation / non-connectivity between the opposite sides of the routes through regular pedestrian crossinas, spatial connections at road intersections, traffic calmina measures etc:
- Design an improved 'sense of place' in the design of the route infrastructure, landscaping, new uses on undeveloped sites, new boundary walls, material choices for roads and NMT surfaces, placement of bus stations, street furniture, enlargement of certain NMT precincts:
- Provide details for the NMT spaces abutting the roadway and future boundary wall definitions;
- Revise the landscape plan to indicate trees abutting Wynberg East (the northern edge of the road).

### Road Infrastructure supporting Wynberg East townscape and local businesses/civic institutions

- Maintain access links to abutting businesses and local nodes and provide sufficient space to accommodate parking close to business activities:
- Parking facilities should be intermittently spaced with extended sidewalks with street furniture (seating/lights/dustbins) and landscaping.
- Retain / or reuse the historic existing granite and sandstone kerbs.
- Create multifunctional parking courts in resultant open spaces.

#### Road infrastructure

- Design a road that considers more than busses and car, a road that is not designed only for the bus timetable, a road that has the following attributes:
  - Ease of accessibility (Promote pedestrian and vehicle connectivity to the road, promote connectivity between Wynberg east and Plumstead Promotes walkability and cycling, ease of navigation and movement to provide access to the desired location);
  - Effective separation between vehicles and pedestrians (trees, low vegetation, planters, bollards or other elements provide effective dividers for all users);
  - Safety (separation is crucial, crosswalks and parking spaces with visible signs, proper accessible spaces and curbs);
  - Space for lounging (seats where people can relax and interact along the street);
  - o Preserve the scenery (People should be able to view buildings, businesses or points of interest from the street);
  - Landscaping (trees and low scale plants on the edges and low planting on median where possible, trees on both sides of the road);
  - Distinct design (a unique space created with materials, signage, lighting, landscape, markings, art, trees to provide a sense of place);
  - o Design pedestrian and vehicular movement onto and across the proposed route;
  - o Design a character to the route in the design of boundary definitions, vegetation, parks etc.
- In this residential precinct, create traffic calming measures to reduce the traffic speed and encourage pedestrian crossings across the road.

## <u>Culturally Significant buildings and structures</u>

- Particular design consideration should occur in the context of culturally significant structures and buildings in order to
  enhance the setting and ensure the character & streetscapes of the project area benefits from the proposed project;
- Design to enhance and retain local nodes, local landmark buildings and mature trees that enhance the legibility of the townscape and route for the residents, visitors and road users;
- During construction phase retain and protect all historic kerbs along the existing roads.

## Non-Motorised Transport (NMT) route

- Accommodate pedestrians and cyclists in a dedicated NMT route/s alongside the route;
- Design a coherent NMT route along Main Road that accommodates safer cycling routes and accommodates the variety of building setback distances; EAP note: This design informant will be relevant only to the IRT W8 project where it converges with Main Road.
- Ensure safety for the users on the NMT route through separation of the route from the vehicular lanes where possible;
- Highlight the difference of the NMT route from the bus and vehicular lanes, for example through a different surface material and levels;
- Consider wider NMT routes at retail outlets, social amenities, intersections and nodes to provide safely for cyclists and pedestrians;
- At pedestrian linkages include trees, street furniture and amenities to provide pedestrian comfort;
- Provide opportunities to park cycles in safe places near bus stations to encourage inter-modal transit use;
- If wide (>2m) NMT routes are not possible for the entire NMT length, provide pockets of spaces along the NMT route around bus stops and mixed-use precincts for sufficient pause and gathering where urban furniture such as benches, dustbins, electric boxes and landscaping/trees can be introduced. This also allows for the remainder of the NMT route to be free of obstacles and urban clutter.
- Provide details for the NMT spaces abutting the roadway and future boundary wall definitions.
- Encourage pedestrian safety measures around Douglas Road Primary School and the Wynberg Creche.

A shared street treatment at the new proposed cul-de-sac would integrate with the current island- adding parking
and improving pedestrian connectivity.

## **Bus Stops**

 Provide universally accessible public space/ waiting area adjacent to bus stops which incorporates landscaping, sufficient sidewalk widths and urban furniture such as, but not limited to, lighting, a bench, dustbin, signage and a shading structure.

## Undeveloped Land abutting the route and/or in immediate site context

Rezone (if required) and develop land that has been previously reserved for this road scheme.

### Vegetation

- Where possible retain all mature trees on the road reserves abutting the proposed roadway;
- Plant trees where possible on sites and road reserves in the immediate context to the route, for example smaller 'pockets' of land abutting the route;
- Promote partnerships between the CCT, local civic/s to plant and maintain trees on public owned sites;
- Design sufficient sidewalk provision to allow for tree planting.
- CCT Recreational and Parks and Civics should organise the partnerships to benefit the landscaping on the proposed route.
- Commitment required from CCT Recreational and Parks to maintain the proposed vegetation over a two year period.

#### **SOCIAL INDICATORS**

- Retain the social fabric on South Road;
- If possible avoid or minimise negative impacts to properties abutting the proposed MyCiti route, such as reduced property values, sense of places, aesthetics and views;
- Where involuntary relocation is unavoidable, alternative options that minimise the number of people affected should be selected.
- Where involuntary relocation is unavoidable, all people affected should be compensated fully and fairly for lost assets at market related prices.
- Project should be an opportunity to up-grade local areas, e.g. install new play equipment for children and / or outdoor fitness equipment for the communities;
- Project should not result in minimal negative impacts to local property owners.

## **VISUAL INDICATORS**

- Retain mature existing trees and provide additional street tree planting for continued and augmented urban street tree succession.
- Provide sufficient urban precinct lighting and street furniture but avoid light pollution by reducing lighting to the minimum necessary.
- Lighting is to be carefully controlled and well-integrated into the urban design and coordinated with signage. Light sources must be shielded to reduce light spillage.
- Shielded down-lights to be used where required from a security perspective, for example onto open areas.

## **URBAN DESIGN INFORMANTS**

The urban design informants that should guide the final project include key factors such as existing important non-motorized transport (NMT) connections, vehicular and pedestrian entrances, current interface conditions, character and heritage buildings, existing public facilities and land uses, places and destinations, and, most importantly, the unused space within the road reserve. These urban design informants, along with the challenges and opportunities they present, will ideally help define urban design indicators that can steer future development in the area, ensuring it is positive, inclusive, and resilient.

## Integrated two-way cycle lane

Integrate cycle lanes on the southern street side to create a dedicated dual cycle and pedestrian walkway in order to create sufficient sidewalk width on the northern street side.

## NMT Connections and crossings

Provide regular crossings along South Road locations that relate to the street grid and key destinations/ desire lines in the local area. These locations should include special landscape treatment to promote spatial integration and mitigate the barrier impacts caused by the new IRT route.

# LANDSCAPING REQUIREMENTS

## Hard Landscapina

- Surface treatments to be designed in association with the civil engineering team, using specifications related to the
  appropriate use, i.e.Pedestrian and shared facilities;
- To take into account best practice for Universal Access aligned to the 'National Strategic Framework on Universal
  Design and Access as issued by the Department of Women, Youth and Persons with Disabilities Notice 606 Of 2021 (or
  as may be appropriate).

## <u>Soft Landscaping</u>

The planting approach will be guided by best horticultural practices and standards combined with experience of
suitable plant material especially trees as structure planting. Standards as set out by associations such as the South
African Landscapers Institute (SALI) 'Landscape Standards' and the South African Nurseryman Association (SANA) to
be used as minimum standards.

#### Irrigation

- Irrigation to be designed taking into account the nature of the project, its context within a semi-urban environment and using the Landscape Irrigation Association (LIA) standards as a minimum guide.
- Irrigation to be designed by an accredited specialist irrigation designer and implemented by a certified irrigation contractor.

## Minimum Design Specifications

General specifications will be developed as the standard for implementation and maintenance of new landscapes, along with detailed specifications for components specific to the project.

- Robust design of hard and soft landscaping;
- Provision of safe and secure spaces;
- Simplicity of design;
- Sustainable design to enable efficient maintenance and management
- Appropriate scale and use of spaces.
- Must be viable and sustainable.

### Design Strategies (High Level)

- Design primarily in support of the transit corridor and its core function;
- Improving User experience by creating human-scaled, comfortable spaces with shade and shelter, active and passive recreation spaces.

## Type

- Previous IRT work packages used a model of automated irrigation in the central medians, and a manual (hand watering) system by means of drag lines on the road verges;
- Consideration must be made for trees on a separate bubbler system for independent management of their watering.

#### Lifespan & cost:

• The irrigation system should be designed to have a lifespan of +-15 years, provided the system is maintained.

#### **Duration of use:**

- Ideally, once the landscaping has established (+-3 years), the irrigation would be reduced to a minimum and used for supplementary watering only plant selection should be guided by this.
- Trees should be watered for at least 3 seasons.

## Protection of infrastructure:

All measures to protect controllers/filters and meters should be taken, i.e.: installed in lockable manholes.

The following overall recommendations have been noted within the Heritage Impact Assessment:

- Create a space that the route is a component within and is defined and complemented by the gateways to the route, adjacent buildings, soft and hard landscaping, route materials, buildings;
- Promote pedestrian activity along both the route edges;
- Design numerous pedestrian crossings across South Road to connect Wynberg East and Plumstead suburbs;
- Design positive land use changes along the route in the left of land large enough for future buildings.
- Design quality public spaces along the route that contribute to the aesthetics of the route and the local communities

To mitigate the negative impact of the new wide road between Wynberg East and Plumstead, the following steps are recommended:

- Enhancing spatial integration between the two suburbs.
- Creating a safer, more aesthetic, and spatially coherent roadway.
- Improving non-motorized transport (NMT) routes.
- Better integrating the roadway with historic buildings.
- Establishing a local character for the road with prominent gateways.
- Developing the remaining land along the route.
- Urban design recommendations aim to provide a sense of 'completeness' to the area.

## <u>Townscapes</u>

In order to mitigate negative impacts onto Wynberg East, there needs to be the following:

- A degree of visual and spatial separation from the road and the properties to accommodate trees, NMT route, structures to define the NMT route, people congregating around business and civic facilities;
- Additional pedestrian and vehicular crossings on South Road.

- Provision of material differences along the road to denote the pedestrian and vehicle crossings, civic use sites and local business (e.g., café);
- Design of traffic calming along the road to enable the route to be a safe people space;
- Until the vacant land is developed south of the road, develop multi-functional courts for recreational and / or vehicular
  uses, neighbourhood parks with fitness equipment;
- The CCT investigates the expansion of the proposed HPO southwards until South Road.

#### **Buildings, Sites and their Uses**

- Revise the road interface to Wynberg East, as recommended by the Urban Design study;
- Revise the Landscape Plan to provide trees on the edge of Wynberg East.

#### **Streetscapes in Context**

- Signify the route intersections on South Road, through landscaping (hard and soft), material differences, public art, signage.
- Introduce place-making strategies at bus/transit stops with people orientated spaces for circulation and waiting areas, and include amenities such as benches, dustbins, lighting, bicycle racks and information (interpretive signage) and trees to provide shade while waiting for buses:
- Design for future use of vacant areas abutting the route, such as development or residential and/or commercial development, green public open space, vehicular parking or consolidated into larger pockets for No 'dead-space' adjacent to the route should be allowed post construction;

### **NMT**

- Promote safe and accessible NMT routes and NMT areas for peoples use (e.a. local businesses):
- Promote safety on NMT routes through separation from the road by using effective kerbs, bollards, trees that prevent vehicles from accessing the NMT routes.
- Increase pedestrian linkages closer to shopping/mixed-use precincts in the form of sufficiently wide and universal sidewalks (>2m) and pedestrian crossings. Pedestrian linkages should be especially enhanced around the proposed bus station.

## **Buildings Facades and Structures Along the Route**

- Design the structures along the route, knowing that certain route and erf boundary definitions will not be permanent as the vacant (remaining) land could be developed in future edges of the route.
- Further detail design required on all structures and boundary definitions abutting the roadway.

## Activate and consolidate adjacent properties

• Landscaping and NMT improvements on the southern roadside that align with the long term vision should be implemented with the construction of the IRT route.

## Landscaping Plan

- Additional detailed information on the materialist and planting proposals;
- Improved hard and soft landscaping on the gateway precincts per the Urban Design recommendations;
- Inclusion of trees and lower vegetation on the northern edge of the route;
- Proposal of certain trees grouped together within interlinked vegetated beds;
- Information on how the tree and plant species will be varied within the planting programme;
- Details on hard landscaping, such as benches;

The specific recommendations are as follows:

## Road Infrastructure

Revision of the road infrastructure drawings to include:

- Revision of the NMT and local road on the edge of Wynberg East;
- Revision of the NMT on the south edge of the road to provide a dedicated cycle lane.

## Landscape Plans

The landscaping plans are revised to include:

Additional detailed information on the materialist and planting proposals;

## **Urban Design recommendations:**

- Improved hard and soft landscaping on the gateway precincts per the Urban Design recommendations;
- Inclusion of trees and lower vegetation on the northern edge of the route;
- Proposal of certain trees grouped together within interlinked vegetated beds;
- Information on how the tree and plant species will be varied within the planting programme;
- Details on hard landscaping, such as benches;

## The HIA recommends the following to HWC for approval:

• The HIA accepted by HWC as it meets the requirements of NHRA Section 38(3);

- The recommendations contained in Section 15.2 of the HIA are approved by HWC and the proposed road infrastructure is recommended for revision to address the Urban Design, Visual and Social recommendations;
- Approve the demolitions of the partial or full structures on the site as contained in Table 26:
- HWC provides a negative comment to DEA&DP for the application due to the assessed the high negative impacts on the townscape, visual and social environments, unless the application is revised and resubmitted to HWC for an assessment:
- The CCT commits to inform the relevant CCT Directorates of the potential to develop the identified remaining land;
- The CCT Arts and Culture and/or Environment and Heritage Management Branch work on the implementation of public art and interpretive signage within the project area
- The DEA&DP ROD to include the archaeological requirements.

### RECOMMENDED MITIGATION MEASURES TO MANAGE POTENTIAL SOCIAL IMPACT AS IDENTIFIED BY BARBOUR (2024)

- The required legal process should be followed to evict tenants from properties owned by the CCT. The CCT should
  also engage with affected households to discuss a reasonable timeframe to move into the alternative
  accommodation.
- The CCT has a formal land acquisition process. From a social perspective the following best practice principle should be adhered to:
  - o Affected property owners should be compensated fully and fairly for lost assets at market related prices.
  - The process should be fair and transparent and include the option of an independent valuation if requested. The costs of the independent valuation should be covered by the CCT.
  - o Compensation should enable affected property owners to find a suitable replacement property located within the same or similar residential area.
  - Consider potential lost rental income in the event that they cannot lease the property due to uncertainty over timing of purchase by CCT.
  - Cover all legal costs associated with purchase and transfer of a new property.
  - o Cover removal costs associated with moving to their new property.
  - Where feasible, the CCT should aim to finalise the negotiation process within a reasonable timeframe to be discussed and agreed with the sellers.
- The CCT should inform the local community leaders, organizations and councillors of the project and the potential job opportunities for local builders and contractors.
- The CCT should establish a database of local construction companies in the area, specifically SMME's owned and run by HDI's, prior to the commencement of the tender process for the project. These companies should be notified of the tender process and invited to bid for project related work.
- The CCT in consultation with the appointed contractor/s should look to employ a percentage of the labour required
  for the construction phase from local area to maximize opportunities for members from the local HD communities.
- The CCT should establish a Monitoring Committee (MC) to monitor construction phase of the project. The MC should include representatives from the CCT, contractors, local ward councillor and representatives from the community.
- The CCT should establish a Grievance Mechanism (GM) that enables members from the local community to reports concerns. The GM should provide a procedure for receiving, screening, addressing, and recording/documenting complaints and communication from affected communities. The GM should be easily accessible and communicated to affected communities. The GM should also make provision to ensure the confidentiality of the person raising the complaint is protected if requested.
- The MC and GM should be put in place before construction commences.
- The CCT should appoint local contractors.
- The CCT in consultation with the appointed contractor should implement an HIV/AIDS awareness programme for all
  construction workers at the outset of the construction phase.
- The movement of construction workers on and off the site should be closely managed and monitored by the contractors.
- No construction workers, with the exception of security personnel, should be allowed to stay on site overnight.
- Construction related activities should comply with all relevant building regulations. In this regard activities on site should be restricted to between 07h00 and 18h00 during weekdays and 08h00 and 13h00 on Saturdays.
- The need to undertake work after 13h00 on Saturdays and on Sundays should be discussed with the MC.
- The CCT should prepare Communication Plan (CP) before the construction phase commences. The aim of the CP should be to provide information on the timing of the construction phase, location of stop-go's, duration of delays, potential road closures etc. The CP should maximise the opportunities associated with social media (Facebook, WhatsApp etc.) to inform local residents, schools, and business etc. that may be affected by construction activities.
- Measures should be put in place to minimise the impact on road users during the morning and afternoon peak
  periods. This includes measures to ensure that access to schools in the morning peak period (between 07h00 and
  07h45) is not impacted by the construction related activities. These measures should be discussed with
  representatives from the local community before being finalised.
- Abnormal loads should be timed to avoid peak traffic hours.

 The CCT should ensure that the required management and operational measures are put in place to ensure that the MyCiTi operations meet the stated TOD objectives of providing safe, affordable, accessible, and efficient public transport.

## RECOMMENDED MITIGATION MEASURES TO MANAGE POTENTIAL VISUAL IMPACT AS IDENTIFIED BY GIBBS (2024)

Visual Indicators for design revision:

- Retain mature existing trees and provide additional street tree planting for continued and augmented urban street tree succession.
- Explore opportunities for urban forecourt / plaza spaces rather than convention traffic intersections, for the reduction in traffic speed and the move towards pedestrian prioritization
- Provide sufficient urban precinct lighting and street furniture but avoid light pollution by reducing lighting to the
  minimum necessary. Lighting is to be carefully controlled and well-integrated into the urban design and coordinated
  with signage. Light sources must be shielded to reduce light spillage. Shielded down-lights to be used where required
  from a security perspective, for example onto open areas.

### Mitigation measures for the **Planning**, **Design and Development phase**:

 Urban design and landscape proposals to improve urban streetscape and plaza areas, prioritizing local pedestrian movement.

## Mitigation measures for the Construction phase:

- Identify and designate established tree clusters as 'no-go areas' for site camp establishment, materials storage, stockpiling, dumping, to avoid and prevent damage or intrusion to these areas.
- Limit construction activity to within the hoarding areas, constructing on disturbed areas only to minimize impact to visual amenity resources identified.
- Ensure post-construction repair and rehabilitation of the site, towards improvement of disturbed, areas and areas degraded by the construction activity.
- Implement a construction phase environmental management plan (CEMP) to ensure on-going management of environmental matters, including noise, dust, and erosion control.
- Environmental management of the site and construction operations including dust prevention and erosion control –
  should be implemented towards mitigation of construction phase visual impacts. The preparation and
  implementation of a Construction Phase Environmental Management Plan (CEMP) is required.

#### Mitigation measures for the Operational phase:

- Noise and air quality control,
- Proper signally and lighting to ensure safety and surveillance
- form / scale / massing / materials / textures to be appropriate to the scale of the context,
- landscape measures to anchor and settle the interventions into the site.
- The preparation and implementation of an Operational Phase Environmental Management Plan (OEMP) should be provided with reference to landscape response plans to ensure that environmental integrity is maintained. The thorough implementation, maintenance, and management of **detailed landscape plans** prepared by qualified landscape architects is required. The implementation of landscape response is essential to bring the visual impact of the proposal towards acceptable levels, and for the proposal to become as compatible with the visual setting as possible, towards achieving a comfortable fit within its immediate context. The City of Cape Town local authority would require the following: "A detailed landscape plan, compiled by a registered Landscape Architect, for the property concerned must be submitted by the developer to the approval of the Environmental Management Division. Such a plan is to indicate, inter alia, the extent, location, and design of the following:
  - existing vegetation to be retained or removed, indicating the types of all vegetation and trees.
  - all proposed newly planted vegetation, including types (species) and planting specifications.
  - tree staking details.
  - the size of all trees to be planted (roots to be established in min 80 100 L size container, with a clear stem height of 1.8 m minimum, and a minimum girth of approximately 60 mm).
  - density of plant species/plant mixes, size of plants to be planted.
  - existing and finished ground levels at the base of the trees to be retained/planted.
  - all landscaping features, including fences, walls, retaining walls, paving, street furniture, and lighting.
  - All Sustainable Urban Drainage Systems (SUDS), including cross-sections of storm-water ponds and/or swales.

# RECOMMENDED MITIGATION MEASURES TO MANAGE POTENTIAL SOCIO-ECONOMIC IMPACT AS IDENTIFIED BY URBAN-ECON (2024)

# Mitigation Measures for the **Pre-Construction Phase**:

• Provide assistance for affected households to find suitable alternative housing options, potentially within the same neighbourhood or vicinity to minimise social disruption.

## Mitigation Measures for the Construction Phase:

- The project developers should employ locally sourced materials, goods and products whenever possible. Likewise, for
  the construction of the road, subcontracting to local construction firms (particularly SMMEs and BBBEE compliant
  enterprises) should be prioritized to the greatest extent possible to create maximum benefit for the communities.
- Coordinate Community Information Events to inform local residents about upcoming projects and employment opportunities available for application.
- Where feasible, effort must be made to employ locally to create maximum benefit for the communities.
- Use local suppliers where feasible and arrange with the local SMMEs to provide transport, catering and other services to the construction crews.
- Prioritise hiring residents for construction jobs to increase household incomes within the community.
- Providing alternative routes for commuters to bypass the construction area, minimizing congestion on affected roads.
- Implement temporary traffic control measures such as signage, signal to manage traffic flow and minimise delays.
- Efforts should be made to keep construction vehicles out of residential areas as much as possible, and scheduling construction activities during off-peak times to mitigate traffic congestion for residents in the area.

#### Mitigation Measures for the Operational Phase:

- The operator of the proposed IRT network development should be encouraged to, as far as possible, procure materials, goods and products required for the operation and maintenance of the development from local suppliers to increase the positive impact in the local economy.
- Ensure jobs are appointed to local community members which in return will directly contribute to the economic wellbeing of local households and the surrounding areas.
- Increase accessibility to economic hubs in areas such the Wynberg area, especially for low-income individuals and families facing mobility barriers. Sufficient MyCiTi buses along this route will benefit individuals travelling the route for work, education, and recreational purposes.
- Ensure that the IRT network operates efficiently, effectively, and at an affordable cost.
- MyCiTi operations should ensure an adequate provision of bus services operating and adherence to departure and arrival times according to IRT operations.
- Regular monitoring of traffic patterns and congestion levels to identify any emerging issues.
- Improve pedestrian infrastructure: by enhancing sidewalks, crosswalks, signal and lighting in the Wynberg area to promote safe and convenient walking and reduce care reliance.

## RECOMMENDED MITIGATION MEASURES TO MANAGE POTENTIAL NOISE IMPACT AS IDENTIFIED BY SOUNDSCAPE (2025)

The following noise management measures to be implemented:

## Mitigation Measures for the Pre-Construction Phase:

- Increase road envelope
- School-Specific Measures (Wynberg Creche and Douglas Road Primary):
  - o Implement specific measures. Target: <40 dBA indoor noise levels
  - o Options: perimeter barriers, building acoustic treatment.

## Mitigation Measures for the Construction Phase:

- Construction activities must be limited to daytime working hours (07:00 to 17:00). If deviation from these hours are
  necessary potentially affected receptors must be informed of the type of activity, expected noise levels, and duration
  of activity.
- Avoid construction over weekends
- Inform communities along road section about the type of activity and duration
- Establish service agreements with contractors regarding minimising noise
- Mobile diesel generators must be fitted with exhaust silencers and contained within suitable acoustic enclosures. Silent generators typically have a rating of between 75 and 85 dBA at 1 m (Aaberg, 2007; FW Power, 2024).
- Implement a regular inspection and maintenance plan to withdraw from service and fix equipment noted to generate
  excessive noise. Applicable but not limited to mobile construction equipment, maintenance equipment, and power
  generation equipment.
- Use mobile enclosure screens/acoustic sheds where needed e.g. jackhammers and compactors.
  - General measures that can reduce noise levels at the source must be adopted:
    - o Avoid unnecessary revving of engines and switch of equipment when not required.
    - o Keep haul roads well maintained and avoid steep gradients.
    - o Use rubber linings in, for example, chutes and dump trucks to reduce impact noise.
    - o Minimise drop height of materials.
    - Start-up plant and vehicles sequentially rather than all together.
    - Audible reversing warning systems on vehicles should be of a type which, while ensuring that they give proper warning, have a minimum noise impact on nearby sensitive receptors.
    - o Maintain temporary roads enforce speed limits
- Contractors and operatives of equipment should be trained to employ appropriate techniques to keep site noise to a minimum and should be effectively supervised to ensure that best working practice in respect of noise reduction is followed. This includes:

- o The proper use and maintenance of equipment.
- o The positioning of machinery on site to reduce the emission of noise to nearby receptors.
- The avoidance of unnecessary noise when carrying out manual operations and when operating plant and equipment.
- A complaint register must be kept at the construction office. Respond to and resolve complaints timeously.
- Conduct a site investigating supported by noise measurements in response to complaints. Source specific mitigation measures must be investigated and implemented as part of the resolution of complaints.

## Mitigation Measures for the Operation Phase:

- Collaborate: government, engineers, community
- Strategic landscaping (supplementary)
- Maintain road surfaces
- Enforce speed limits
- Optimize traffic signalling
- Reroute heavy vehicles
- Community Engagement: Engage and disclose impacts; Ensure informed decision-making.
- 3. List the specialist investigations and the impact management measures that will **not** be implemented and provide an explanation as to why these measures will not be implemented.

The following recommendations from O'Donoghue (2024) will not be implemented:

- Investigate an underpass of the railway line as the bridge will result in high negative social, visual and townscape impacts. The underpass was subject to a technical investigation by the engineers and revealed that an underpass is not feasible from a maintenance and financial perspective. From a social perspective, underpasses have shown to attract vagrants in other parts of the CCT and would require additional surveillance.
- Minimise Road closures and pedestrian linkages on South Road; Road closures are necessary due to level mismatches between the overpass and intersections, as well as the presence of protected bus lanes in the centre of South Road, which restrict north-south movement. The design and access requirements are informed by the Traffic Access Management Guidelines, while the traffic study addresses traffic distribution and access management.
- Retain additional road intersections into South Road from Wynberg East and Plumstead; Road closures are necessary
  due to level mismatches between the overpass and intersections, as well as the presence of protected bus lanes in
  the centre of South Road, which restrict north-south movement. The design and access requirements are informed by
  the Traffic Access Management Guidelines, while the traffic study addresses traffic distribution and access
  management.
- Increased pedestrian and vehicular crossings over South Road; Three pedestrian crossings have been incorporated into the route design at Main Road, Pluto Road, and Ottery Road. In accordance with traffic management guidelines, pedestrians will be directed through critical access points, including intersections and bus stops. Due to the protected bus lanes in the centre of South Road, north-south pedestrian movement will only be possible at these designated access points.
- Include public art around bus stations and along the route for community expression of identity, historical information and aesthetic value. This falls outside of the scope of the CCT Urban Mobility Department who is mandated to implement road infrastructure projects only.
- Locate bus stops close to mixed-use nodes to develop into multi-use areas; This falls outside of the scope of the IRT Phase 2A W8 project (the subject for this application), however it is noted that the wider IRT Phase 2A route fulfils this recommendation.
- Locate transit stops close to mixed-use nodes to develop into multi-use areas which could increase public transit ridership as mixed-use areas activate transit stops and maintain ridership thresholds. This falls outside of the scope of the IRT Phase 2A W8 project (the subject for this application), however it is noted that the wider IRT Phase 2A route fulfils this recommendation. The W8 route accommodates one bus stop in close proximity to Pluto Road.
- In the design of the new boundary definitions, utilise the patterns of the historic precinct, such as front and lateral building facades defining the street; In accordance with the boundary treatment process implemented within the IRT Phase 2A network and the agreement with the private landowner, boundary treatments on private properties will be replaced on a like-for-like basis with what was removed.
- New boundary treatments should not be high walled as this type of boundary definition reduces minimal visual surveillance on the street and has low sound absorption qualities; In accordance with the boundary treatment process implemented within the IRT Phase 2A network and the agreement with the private landowner, boundary treatments on private properties will be replaced on a like-for-like basis with what was removed. Additionally, low walls pose a security risk to the affected landowner. All new retaining walls constructed as part of the overpass design have been subject to technical investigation by the engineering team and comply with the relevant construction, building and engineering guidelines.
- A combination of a low wall (approximately 1.2m high) with a visually permeable fence can be supplemented with a
  hedge within the public or/and private properties; In accordance with the boundary treatment process implemented
  within the IRT Phase 2A network and the agreement with the private landowner, boundary treatments on private
  properties will be replaced on a like-for-like basis with what was removed. Additionally, low walls pose a security risk to
  the affected landowner.

- The surface of all walls should be finished in a product that discourages graffiti (for example, paint specification); In
  accordance with the boundary treatment process implemented within the IRT Phase 2A network and the agreement
  with the private landowner, boundary treatments on private properties will be replaced on a like-for-like basis with what
  was removed.
- Consolidation of residual land, as well as project packaging to enable rezoning and handover to CCT Housing department. This falls outside of the scope of this project and will be the responsibility of the CCT Property Management Department. Additionally, open areas that fall outside of the widened road footprint have been allocated to landscaping.
- New development block to provide additional residential dwelling units and maximise the use of residual land from the CCT property acquisition.
- Green screen/ planted treatment of proposed MSE retaining wall to counter the negative affects of the bridge to residential complexes south of the bridge. The project will not be able to incorporate green walls due to the maintenance requirements, which cannot be implemented by the City of Cape Town.
- The one landmark building along the route is proposed for demolition (café on SE section). Local nodes are provided with no special spatial character. Use the Urban Design informants to revise the application. This is not possible in terms of the preferred alternative given the extent of the route and infrastructure required to support the optimal functionality of this transport solution.
- Retaining walls/ columns of the overpass bridge should include appropriate lighting and mural art to improve public safety. The inclusion of public art falls outside of the scope of the CCT Urban Mobility Department who is mandated to implement road infrastructure projects only.
- Local routes connecting nearby public facilities should be enhanced and improved, and maintain links to South Road.
   Encourage the walkability of Eden Road and the connection to Douglas Road Primary School. This falls outside of the scope of the IRT Phase 2A W8 project (the subject for this application), however it is noted that the wider IRT Phase 2A route fulfils this recommendation.

## **Social Indicators**

- Avoid, and when avoidance is not possible, minimize displacement of people by exploring alternative project designs.
   A thorough route analysis which considered multiple factors, including technical/engineering aspects and property acquisition requirements, informed the most reasonable and feasible route, which was then taken into the environmental investigations.
- Avoid forced eviction of people. All tenants residing in the affected City of Cape Town (CCT) properties designated
  for demolition have either undergone or are currently undergoing a legal eviction process in compliance with
  applicable legal and procedural requirements. Only those residing in structures identified for demolition have been
  included in this process. The demolition of the affected properties is necessary for the implementation of the proposed
  W8 route.

## **Visual Indicators**

- Avoid demolition of existing buildings to retain the integrity and legibility of the urban cultural landscape. Only the buildings essential for the construction of the route will be demolished.
- Explore opportunities for urban forecourt / plaza spaces rather than convention traffic intersections, for the reduction in traffic speed and the move towards pedestrian prioritization. The proposed design and available space adjacent to the W8 route do not allow for the implementation of multi-use courts (pers comms. ATLA. 2025)
- Explore alternative routes, avoiding quiet residential areas, and neighbourhoods of fine grain, by locating the route along courser grain areas of predominantly commercial use. A thorough route analysis which considered multiple factors, including technical/engineering aspects and property acquisition requirements, informed the most reasonable and feasible route, which was then taken into the environmental investigations.
- Explore the viability of the bridge over the railway line (for example the railway line underpass option; The underpass was subject to a technical investigation by the engineers and revealed that an underpass is not feasible from a maintenance and financial perspective. From a social perspective, underpasses have shown to attract vagrants in other parts of the CCT and would require additional surveillance.
- Review existing level crossings as examples of minimal infrastructural intervention, limiting disruption to the urban fabric, minimizing constructions costs, and serving to slow traffic, which is beneficial to the local residential environments. The engineering team have advised that PRASA does not favour level crossings and is against these initiatives due to the risk of vehicular and rail incidents to motorists, cyclists and pedestrians. Additionally, the use of a level crossing is inconsistent with the broader MyCiTi network's ethos of efficient public transport. The construction of the overpass will ensure that traffic is not hindered by rail transit and will provide a safer crossing mechanism for both pedestrians and vehicles. Traffic calming measures will be implemented along the route, including speed limits and signalized intersections.

## Green boulevard and landscaping

Develop a continuous green link (treed boulevard with SUDS landscaping) along the northern side of South Road to
create a transition between the existing low scale, character residential fabric and the new wide IRT roadway. The
draft landscaping plan includes continuous planting along the route where space permits. However, SUDS planting will
not be implemented due to its high initial cost, space requirements, and maintenance needs, which are not feasible

within this project. Landscaping will prioritize low-maintenance indigenous plants, with tree species selected to be resistant to the Polyphagus Shot Hole Borer Beetle.

#### **Gateways**

To promote improved legibility and sense of place, develop gateway spaces at the start/ end of South Road. These gateway spaces should include community park/ open space. Areas that will activate and beautify the residual left over space resulting from the implementation of the IRT roadway Other residual/ left over land parcels on the southern edge of South Road should be integrated within the existing residential fabric to support long term, high-density infill development and positive frontage along South Road. Some land parcels are large enough to enable independent/ standalone housing opportunities, while others will need to be integrated with adjacent sites to support new development. The proposed design and available space adjacent to the W8 route do not allow for the implementation of such spaces (pers comms. ATLA. 2025). However, the draft landscaping plan includes continuous planting along the route where space permits.

## Activate and consolidate adjacent properties

it is recommended that temporary surfacing with visually permeable fencing is used to secure these spaces. It is the intention of the CCT to utilise these spaces for either landscaping or parking. In addition the CCT may enter into agreement with local residents to lease portions of vacant land.

The following recommendations from Barbour (2024) will not be implemented:

- The bridge over the railway line is not supported and should be replaced by an underpass option. The CCT have indicated that the bridge option is the less costly option. However, the cost does not consider the social impacts associated with the bridge, including the significant and permanent impact on property values. A technical investigation by the engineers revealed that an underpass is not feasible from a maintenance and financial perspective. From a social perspective, underpasses have shown to attract vagrants in other parts of the City and would require additional surveillance.
- The number of road closures proposed along the southern site of South Road should be reduced. Road closures are necessary due to level mismatches between the overpass and intersections, as well as the presence of protected bus lanes in the centre of South Road, which restrict north-south movement. The design and access requirements are informed by the Traffic Access Management Guidelines, while the traffic study addresses traffic distribution and access management.
- The width of the road corridor should be reduced to minimise the impact on properties located to the south of the current proposed road corridor. This will create more space for the establishment of a more effective buffer between these properties and proposed development. The proposed route width accommodates vehicular lanes, a protected bus lane, NMT infrastructure, and kerbs. The width of each component is determined by fixed measurements in accordance with road traffic regulations for vehicular roads. Additionally, the size is designed to accommodate future traffic volumes. The engineering design team has reduced lane sizes where feasible, with the minimum requirements already in effect.

The following visual impact management measures from Gibbs, 2024 will not be implemented:

- Avoid demolition of existing buildings to retain the integrity and legibility of the urban cultural landscape. This is not possible in terms of the preferred alternative given the extent of infrastructure required to support the optimal functionality of this transport solution.
- Retain green areas for their amenity value to the local community in terms of informal/overflow parking (serving local businesses and schools) as informal kickabout areas, and potential sustainable urban drainage areas for stormwater management and groundwater recharge, improved ecological value and biodiversity, noting the Cape Flats Sand Fynbos is an endangered vegetation type, and could be reintroduced into these areas. While some of the affected properties are dual zoned which includes OS2, it should be noted that these open areas are not extensively used for recreational activities. It is however periodically used for occasional parking. The William Herbert sport centre provides a formalised and safe space for recreation. Even limited local usage of the open spaces does not warrant compromising the possibility of this proposed transport route which aims to serve the greater community. Furthermore, it should be noted that these open spaces are already simultaneously zoned for Transport purposes.
- Prevent engineered infrastructure from overwhelming and overshadowing the existing local landmark structures (for example: the Corpus Christi Catholic Church) by competing vertically with the existing structures. This will be accommodated as far as possible in the detailed design phase, noting that it may not be possible in all instances due to the extent of infrastructure required to support the optimal functionality of this transport solution. Explore alternative routes, avoiding quiet residential areas, and neighbourhoods of fine grain, by locating the route along courser grain areas of predominantly commercial use. As previously mentioned, a thorough route analysis which considered multiple factors, including technical/engineering aspects and property acquisition requirements, informed the most reasonable and feasible route, which was then taken into the environmental investigations. The City is therefore not considering further route alternatives.
- Explore the viability of the underpass option, testing alternative locations for the underpass (for example at Broad Road, which could improve the current underpass, and omit the need for the proposed Wynberg couplet). See notes above regarding route alternatives and the underpass and why these are not feasible.
- Review existing level crossings as examples of minimal infrastructural intervention, limiting disruption to the urban fabric, minimizing constructions costs, and serving to slow traffic, which is beneficial to the local residential environments. The engineering team have advised that PRASA does not favour level crossings and is against these initiatives due to the risk of vehicular and rail incidents to motorists, cyclists and pedestrians. Additionally, the use of a level crossing is

inconsistent with the broader MyCiTi network's ethos of efficient public transport. The construction of the overpass will ensure that traffic is not hindered by rail transit and will provide a safer crossing mechanism for both pedestrians and vehicles. Traffic calming measures will be implemented along the route, including speed limits and signalized intersections.

The following landscaping measures will not be implemented:

Multi use courts must be included in the abutting land to the route, per the Urban Design recommendations. The
proposed design and available space adjacent to the W8 route do not allow for the implementation of multi-use
courts (pers comms. ATLA. 2025)

Recommendations from Soundscape (2025) will be implemented in a practical manner:

- Recommendations balance effectiveness, practicality, and cost. The complex situation requires collaboration among
  government, engineers, and community stakeholders. Solutions likely combine multiple measures. The specialist
  recommended several measures. The CCT will incorporate a combination of these measures, as practically possible.
- 4. Explain how the proposed development will impact the surrounding communities.

For surrounding community, the following key aspects will be impacted (as detailed in other sections of this BAR):

- Sense of place
- Loss of direct access to South Road from some road
- Visual intrusion
- Increased noise
- Reduced connectivity between communities on either side of South Road.

For the greater community, there will be several socio-economic benefits as explained in other parts of this document.

5. Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.

Given the proposed development's location in Cape Town, which has a history of drought, the most significant impacts of climate change are anticipated to relate to fluctuations in rainfall, water availability on site, and extreme weather events such as droughts and flash floods.

Managing these events is integral to the stormwater management plan, which has been designed to handle both regular water runoff and potential extreme weather scenarios. The plan incorporates climate change considerations adhering to the City of Cape Town's Sustainable Urban Drainage Systems (SUDS) policy. The proposed stormwater drainage system is designed to accommodate a 1 in 10 flood event, further demonstrating its resilience against extreme weather impacts (Pers. comms HHO consulting Engineers, July 2024).

6. Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.

There are no direct conflicts noted between the respective specialists.

In principle, there are certain specialists (visual, social and heritage) that do not support the preferred route given their reported impact on the immediately surrounding community. However, the socio-economic study highlights the overall benefits (big picture) that the development will offer. The determination of South Road as the preferred route was subject to extensive study which considered several factors, including social, financial and technical aspects. While the visual, social and heritage specialists therefore recommends that additional route alternatives must be considered, the EAP notes that this was in fact undertaken to inform the identification of a reasonable and feasible option. This process preceded the Basic Assessment.

Explain how the findings and recommendations of the different specialist studies have been integrated to inform the
most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed
activity or development.

Most of the specialist recommendations will be implemented and is integrated into the EMPr. However, the visual, heritage and social specialists called for the investigation of alternative routes which was found to be not feasible in the City's previous route analysis. Details of the route analysis is included in the alternatives section of this BAR.

8. Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.

The mitigation hierarchy has been applied at various levels through the conceptualisation of the preferred alternative for the proposed development, with the overall goal of the proposal being one which provides an IRT connection along the affected roadways. The chosen route does not adversely affect the natural environment.

Many impacts cannot be completely avoided, given the nature of construction, and seeing that limited extent of land which is available alongside the existing roadway and given that existing roads are being used as a basis for widening (which is preferable over the construction of a completely new road). These impacts (mostly from a visual and social perspective) were identified and mitigation applied, as practically possible It is recognised that the social and visual (and hence the heritage) specialists do not believe that the impacts on the local communities can be mitigated to acceptable levels. From an holistic perspective, not implementing this critical road link will have a detrimental impact on greater CCT community, including a number of previously disadvantaged communities.

The EMPr includes rehabilitation requirements where construction activities may result in changes to any particular area (for example the rehabilitation of "construction scars".

While offsetting is not required for this project, property acquisition will be subject to compensation to relative market indicators.

## SECTION J: GENERAL

## 1. Environmental Impact Statement

### 1.1. Provide a summary of the key findings of the EIA.

The Basic Assessment was aimed at identifying and assessing all significant impacts associated with the proposal. The study revealed that:

- Aquatic and terrestrial biodiversity: no constraints to the development with the specialist supporting the proposal.
- Noise: In addition to the short-term construction noise, the operational phase of the development will increase the
  percentage of land users in the area that will be exposed to noise levels exceeding the recommended levels for
  urban areas. Regardless, the specialist supports the proposal, with the implementation of a combination of possible
  mitigation measures.
- **Visual and Social**: The respective specialists found that the proposal presents unacceptably high impacts on the affected communities, and hence, they do not support the proposed development.
- **Heritage**: Given that the HIA is focussed on the visual and social assessment, the Heritage Practitioner is also not supportive of the development as proposed.
- **Socio-economic**: The study recognises the negative impacts, however, it is concluded that the positive impacts will outweigh the negative and as such, the specialist supports the proposal.
- Traffic: The traffic study highlights several key impacts, including the replacement of a slip lane with a dedicated left-turn lane at the Ottery Road/South Road/Rosmead Avenue/Prince George Drive intersection, the closure of the Pluto Road southern leg, and the introduction of new left-in, left-out accesses. Traffic previously using Pluto Road will be redistributed to these new access points. Future (2040) projections show varying levels of service across key intersections, with some operating efficiently (LOS A–D), while others, like the Ottery Road/South Road intersection, may face higher congestion (LOS E in AM peak). Additional formal parking is planned as part of Work Package W8, along with continuous Class 2 cycle lanes, amended sidewalks, and pedestrian crossings. Queue lengths between closely spaced intersections are expected to remain within acceptable limits, and dedicated bus lanes will operate at a reasonable level of service. Overall, the proposed changes aim to improve traffic flow, accommodate future growth, and enhance non-motorized transport infrastructure.

In addition to the inputs of the specialists, other need and desirability considerations were taken into account to inform the EAP's overall recommendation to support the project, as concluded in Section 2 below.

1.2. Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)

Note that there are no environmentally sensitive areas on site. The EMPr specifies that any "construction scars" to adjacent properties must be rehabilitated following construction.

1.3. Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

Please see overleaf for Summary Impact Table in Table 16 and Table 17.

Table 16. Summary of impacts for Planning, Design and Development Phase

		Preferred Alternative (Overpass)		Design Alternative (Underpass)		No-Go Alternative	
_	Impact	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation
Development	<b>General:</b> Resource Use - Depletion of natural Resources	Medium (-)	Low (-)	Medium (-)	Low (-)	Zero	Not Applicable
velop	General: Subsidence	only identified	e as impact was I for the design (underpass)	High (-)	Medium/High (-)	Not c	applicable
	General: Traffic Impacts	Medium (-)	Low (-) to Medium (-)	Medium (-)	Low (-) to Medium (-)	Not applicable	
Design and	<b>Social:</b> Creation of employment and business opportunities during the construction phase	Medium (40)	Medium (55)	Not as	ssessed	No impact as it maintains the curren status quo.	
	<b>Social:</b> Potential impacts on family structures and social networks associated with the presence of construction workers.	Low (18)	Low (15)	Not as	ssessed	No impact as it maintains the current status quo.	
Planning,	<b>Social:</b> Potential safety and security risk posed by presence of construction workers on a site.	Medium (40)	Low (24)	Not as	ssessed	No impact as it maintains the curre status quo.	
	<b>Social:</b> Potential noise dust and safety impacts associated with movement of construction related traffic to and from the site.	Medium (33)	Low (24)	Not as	ssessed	No impact as it maintains the current status quo.	
Phase:	<b>Socio-Economic:</b> Legal eviction of affected households	Medium (-)	Low (-)	Medium (-)	Low(-)		None
4	Socio-Economic: Temporary impact on local economy (GDP)	Medium/High (+)	High (+)	Medium/High (+)	High (+)		None
	Socio-Economic: Temporary impact on employment	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)		None

<b>Socio-Economic:</b> Temporary impact household income	Medium/High (+)	High (+)	Medium/High (+)	High (+)	None
<b>Socio-Economic:</b> Temporary impacts sense of place	t on Medium (-)	Medium (-)	Medium (-)	Medium (-)	None
<b>Socio-Economic:</b> Temporary impactraffic congestion	t on Medium/High (-)	Low(-)	Medium/High (-)	Low(-)	None
Visual: Visual Impacts	High (-)	Moderate (-)	Moderate (-)	Moderate (-)	Neutral
Heritage: Townscape, road closures, environment, natural environment, prealm including streetscape and NM over land, rail crossing.	oublic High Negative	High Positive (70)	Not as	sessed	Not Applicable
Noise: Noise Impacts	Medium/High	Medium (-)	Medium/High	Medium (-)	No construction therefore no noise impact

Table 17. Summary of impacts for Operational Phase

	Impact	Preferred Alternative (Overpass)		Design Alternative (Underpass)		No-Go ALTERNATIVE	
_		Before Mitigation	After Mitigation	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation
ionc	General: Traffic impacts	Very High (+)	High (+)	Very High (+)	High (+)	Not Ap	plicable
Operational	General: Climate change impacts – reduction in Greenhouse Gas emissions	High (+)	High (+)	High (+)	High (+)		impacts would be
_	<b>Social:</b> Provision of safe, affordable, accessible and efficient public transport	Medium (56)	High (75)	Not as	sessed		it maintains the tatus quo.
Phase:	Impact on the social fabric of the area, specifically the areas located along South Road.     Environmental justice issues.     Impacts associated with involuntary resettlement.	High (80)	Medium (44)	Not as	sessed	'	it maintains the tatus quo.

<ul> <li>Impacts associated with the proposed bridge over the railway line.</li> <li>Impacts associated with proposed road closures along South Road.</li> </ul>						
Social: The no-development option (no- go alternative) would represent a lost opportunity to implement the CCTs Transit-Oriented Development (TOD) approach to spatial planning and would be contrary to the stated objectives and principles contained in the CCT SDF and IDP.		Not App	olicable		High (80)	High (70)
Socio-Economic: Impact on production and GDP during operational phase	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	No	ne
<b>Socio-Economic:</b> Sustainable impact on employment	Low(+)	Low(+)	Low(+)	Low(+)	No	ne
Socio-Economic: Sustainable impact of transport affordability on household income	Medium (+)	Medium (+)	Medium (+)	Medium (+)	No	ne
Socio-Economic: Sustainable impact on increased mobility and access to public transport	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	No	ne
<b>Socio-Economic:</b> Sustainable impact on travel time	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	No	ne
Socio-Economic: Impact on access to work opportunities	Medium/High (+)	Medium/High (+)	Medium/High (+)	Medium/High (+)	No	ne
<b>Socio-Economic</b> Sustainable impact on traffic congestion	Medium (+)	Medium (+)	Medium (+)	Medium (+)	No	ne
<b>Socio-Economic:</b> Sustainable impact on access to education, recreational and health facilities	Medium/High (+)	High (+)	Medium/High (+)	High (+)	No	ne
Socio-Economic: Impact on enhancement of Wynberg as a commercial node	Medium (+)	Medium/High (+)	Medium (+)	Medium/High (+)	No	ne

Visual: Visual impacts	Very High (-)	High (-)	High (-)	Moderate (-)	Neutral (0)
<b>Noise:</b> Noise impacts	Medium/High	Medium/High (- )	Medium/High	Medium/High (- )	Residents along sections of current South Road alignment are already exposed to noise levels above the CCT determined rating level for such districts.  The noise impact will remain unchanged.

## 2. Recommendation of the Environmental Assessment Practitioner ("EAP")

2.1. Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr

The Environmental Management Programme has been developed to address the impacts identified during the impact assessment process and incorporates all suitable mitigation measures recommended by independent specialists, as well as those proposed by the Environmental Assessment Practitioner (EAP). These mitigation measures, or environmental specifications, have been integrated into all phases of the development, except for decommissioning, as this is not the Applicant's intention. This approach ensures that environmental considerations are appropriately managed at every stage of the project, supporting integrated environmental management.

The EMPr is a legally binding document that must be implemented by the Applicant and their Contractors. Additionally, it includes a reporting framework that requires regular independent auditing during the construction phase to ensure compliance. While auditing during the operational phase is limited due to the nature of the development and the predominance of positive operational impacts, a single audit by an independent and suitably qualified professional is required within six months of operation. Any further operational audits would be at the discretion of the Department of Environmental Affairs and Development Planning (DEA&DP) and subject to the applicable environmental regulations at that time.

The impact management objective and outcomes are included in the EMPr and summarised in Table 18.

Table 18. Impact management objective and outcomes

No.	Impact/ Aspect of the proposed development	Impact Management Objective	Impact Management Outcome
1	Detail design measures	To ensure that the final designs are in line with the considerations contemplated in the environmental assessment phase	No deviations from the specifications listed in the EMPr in this regard
2	Waste Management	To prevent pollution/contamination associated with the generation and temporary storage of general waste, hazardous waste construction rubble and litter generated by the workforce on site.	No non-conformances and no pollution of soil, groundwater and/or stormwater as a result of waste generation and management activities.
3	Site Establishment and Site Camp Management	To ensure the site is contained to prevent unnecessary impacts on the surrounding environment and adjacent land-users, and the safety of all site personnel as well as adjacent land users.	No injuries / incidents on site and emergency situations managed effectively. No safety breaches. No damage to surrounding properties or encroachment into environmentally sensitive areas.
4	Pollution Management	To prevent groundwater and freshwater pollution associated with the handling storage and use of hazardous materials or materials that have the potential to cause environmental harm, including fuel (hydrocarbons)	No non-conformances, no evidence of pollution groundwater and/or stormwater or any watercourses as a result of the construction activities.
5	Protection of Aquatic Features, Fauna and Flora	To ensure that no vegetative cover is removed and/or impacted on outside of the approved works area (i.e., the designated route corridor). To prevent impacts on fauna found on the site. To avoid intrusion into the adjacent wetland areas and prevent related impacts.	No removal of vegetation and/or other impacts on any vegetative cover in the area outside of the route corridor. No damage or defacing of any natural features situated in or around the site. No negative impacts on fauna. No harm or destruction to wetland areas and loss of stormwater function outside the road corridor.
6	Protection of any Palaeontological and Archaeological Resources	Protection of archaeological and/or palaeontological resources on, or adjacent to the site.	No non-conformances in terms of the specifications contained in the EMPr and no impacts on such resources.
7	Noise Management	To avoid and/or minimise impacts on the adjacent residential communities and ensure that any such impacts are appropriately dealt with to prevent further impacts in the longer term. To provide a forum for any Interested and/or Affected Parties to raise their concerns and log complaints for remediation action and prevention of similar incidents.	No disruptions or nuisance to adjacent communities caused by noise from the construction site. Effective complaints handling. No repeat complaints received

8	Dust Management	No unacceptable levels of dust. To avoid and/or minimise impacts on the adjacent road network and communities and ensure that any such impacts are appropriately dealt with to prevent further impacts in the longer term. To prevent wind and water erosion and/or sedimentation of any natural features. To provide a forum for any Interested and/or Affected Parties to raise their concerns and log complaints for remediation action and prevention of similar incidents.	No disruptions to traffic, no nuisance to adjacent communities caused by dust. Effective complaints handling. No repeat complaints received.
9	Aesthetics/ Visual	To ensure that visual impacts are avoided as far as possible, and where these cannot be altogether avoided, that it is reduced to acceptable limits.	No unacceptable visual impacts occur as a result of construction activities.
10	Site Access, Access Routes and Traffic Management	To avoid and/or minimise impacts on the adjacent road network and road users any such impacts are appropriately dealt with to prevent further impacts in the longer term. To avoid construction related impacts associated with the movement of construction vehicles.	No disruptions to traffic or adjacent residents, no damage to vehicles and related claims and no nuisance to adjacent communities caused by dust.
12	Incident Management	To guide the way in which emergencies and/or environmental incidents are handled on site and remediate any damage appropriately. To prevent the starting of fires on site.	No non-conformances and no adverse impacts on the environment as a result of emergency situations and/or environmental incidents. No fires started on the site.
13	Resource Use (Raw Materials and Resources)	To prevent excessive and unnecessary use of natural resources and wasting of natural resources during the construction phase.	Development of an attitude towards a reduction in natural resources consumption where feasible and possible
14	Site Clean-up and Rehabilitation	To prevent impacts on the environment as a result of the conclusion of construction activities and any related impacts requiring rehabilitation actions prior to the contractors leaving the site.	No non-conformances with the specifications contained within the EMPr.

2.2. Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.

- The EMPr and associated appendices (**Appendix H**) must be implemented, and the requirements therein considered and observed as conditions of authorisation;
- Mitigation measures noted from this BAR are included in the EMPr (refer to **Appendix H**), noting that some of the specialist recommendations cannot be accommodated, as detailed in this BAR.
- The EMPr should be incorporated into all tender and contract documentation.
- An ECO must be employed throughout the duration of the construction phase of the activity and the Applicant should also ensure that operational phase recommendations are strictly adhered to.
- As updated plans and documentation are required in terms of the EMPr which can only be completed upon detailed
  design of the proposed development, the updating of these items should not necessitate an Amendment Application
  for an amendment to the EMPr for each site. The updates are restricted to the following:
  - o Incorporate conditions and specifications imposed by the Department of Environmental Affairs and Development Planning if Environmental Authorisation is granted;
  - o Reflect the final approved Road Upgrade Plans;
  - o Reflect the final approved Stormwater Management Plan; and
  - o Reflect the final approved Landscaping Plan.
- Any future road widening would need to be considered against the requirements of the applicable law at the time.

# 2.3. Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.

It is acknowledged that the visual and social specialists believe that the impact on the surrounding community suggests the need for investigation of an alternative route. Seeing that the heritage study was focussed on visual and social matters, the heritage specialist supports the conclusions of these specialists and recommended to HWC that a negative comment be given to the DEA&DP. HWC's comment will be included in the final BAR.

As mentioned above, and repeated here, the alternatives analysis explored multiple route options and the preferred route was deemed to be the most reasonable and feasible option that the City could consider for implementation. This decision was based on technical, social and financial factors that were considered in a peer-revied, in-depth investigation (see 'note on alternative routes' as included in Section H(1.1) of this report). Given the importance of this link (as exemplified in the Urban-Econ socioeconomic report), and the alignment of this project with national, provincial and local policies, it is critical to view this project with

a wider lens. The development presents the opportunity for historical redress through improved connectivity and access provided by the proposed road widening for generations to come.

Whilst acknowledging the noise, social, visual and heritage impacts on the community in the immediate vicinity of the project, the proposal is in the interest of the greater good of a much larger community.

The proposed development meets the need and desirability criteria by addressing critical infrastructure gaps in the City of Cape Town's public transport network, improving accessibility, mobility, and sustainability. The project is aligned with both the City's spatial, development and transport planning frameworks and municipal goals, contributing to economic development, social equity, and environmental sustainability. The development is designed to meet current and future needs, with clear benefits to the broader communities, including improved access to essential services and better transportation options, ensuring that it is both desirable and necessary for the long-term growth and well-being of the area.

This section will be updated when the comments on the Draft BAR have been considered.

On balance and taking into account the positive impact on the greater Cape Town area, especially numerous previously disadvantaged communities, it is the recommendation of the EAP that the Preferred Alternative 1 be authorised.

2.4. Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.

The assumptions and limitations associated with the various specialist studies are noted in the respective specialist reports, and in the interest of brevity, will not be repeated here.

The basic assessment process and this BAR are based on the following assumptions:

- That all information received from sources contributing to this project is accurate and unbiased;
- That all organs of state and I&APs with the intent to comment on the documentation will do so within the prescribed timeframes, or, failing this, that they do not have any comment (as considered in the NEMA EIA Regulations); and
- That the applicant will implement the recommendations resulting from this study.

There are no known gaps in knowledge or uncertainties. It is however noted that at this point, the outcome of the public participation process may result in changes to this report and conclusions. This will be captured in the Final BAR.

2.5. The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.

Refer to Table 19 for the various suggested approval validity periods.

Table 19: Suggested EA Approval Periods

i.	the period within which commencement must	5 years
	occur;	
ii.	the period for which the environmental authorisation is granted and the date on which the development proposal will have been concluded, where the environmental authorisation does not include operational aspects;	10 years (this is recommended given that the City of Cape Town procurement and contracting processes take time to resolve and, further, there are temporal limitations on when construction activities can occur nearby the aquatic aspects within and adjacent to the route)
iii.	the period for which the portion of the environmental authorisation that deals with operational aspects is granted.	1 year (this is recommended so that an audit can be done to confirm the development proposal has been developed as planned/intended)

## 3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.

The proposed development will not use water during the operational phase, however water saving principles have been included in the EMPr (refer to **Appendix H**) for the construction phase. Some examples include the following:

- Conduct activities in accordance with any water restrictions set by the local Municipality in terms of the applicable By-Law which may be in place at the time.
- The City of Cape Town has been faced with severe drought conditions in the past decade, which are anticipated to increase in frequency and intensity as a result of the current climate crisis (Pascale et al, 2020). With that in mind, Contractors are encouraged to use treated effluent water for construction activities as far as possible. Contractors may apply to the City for the use treated effluent water. Treated effluent can be supplied in three different ways:
  - By connecting to the treated effluent pipe network;
  - o By hiring a metered treated effluent standpipe; and
  - o By collecting it directly from the wastewater treatment works.

- o To apply for supply of treated effluent water, residents should please visit the City's website: www.capetown.gov.za/treated-effluent. This page outlines the application process and contains all relevant auidelines and forms, as well as copies of related by-laws for download.
- The City's Water By-laws prohibit the use of drinking water for non-structural work such as dust control.
- Where the use of potable water is required, such as for mixing of cement, the Contractor must submit an application for the use of potable water on site prior to starting construction.
- As far as possible, limit the use of potable water to activities which require them.
- Dripping taps/ leaking pipes should be addressed immediately to limit waste of water.

### 4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.

Construction waste will include general waste (such as plastic packaging, strapping, lunch wrappers.), rubble (such as broken asphalt, waste concrete), limited quantities of hazardous waste items (e.g., paint tins, oil cans etc.) and waste oil resulting from the servicing or repair of vehicles and plant on site.

Construction contractors will remove the waste to registered landfill sites or approved recycling facilities. This would amount to 45 000 m³ for approximately 33 months (information provided by HHO Consulting Engineers, February 2025).

Given that the EMPr requires the use of portable toilets, no wastewater would be discharged into the existing sewer system during construction.

Measures for the reduction, reuse and recycling of waste would apply only to the construction phase. Some measures have been included in the EMPr (**Appendix H**) and these include the following:

- Make use of locally supplied building materials where possible.
- Reclaimed building materials should be used where possible.
- In accordance with the integrated waste management approach (to be followed through the construction phases of the development) materials used or generated by construction, or the construction areas of other City of Cape Town projects nearby shall be re-used as far as possible.
- No materials containing invasive plant seeds, litter or contaminants may be imported.
- Suppliers shall be informed of the sites of origin of imported gravel, sand, stone, etc. and shall have the authority to reject imported material if deemed necessary.
- Durable building materials to increase the lifespan of the developments should be used.
- Low VOC paints & building materials should be used, where possible.
- Adequate storage facilities for raw materials should be provided to minimise damage during construction works.
- Where possible, suppliers with a green footprint or certification are to be used.
- Where possible, sustainable building materials should be used.

No specific measures would be implemented during the operational phase as there would be no operational waste produced as a result of the proposed development.

# 5. Energy Efficiency

8.1. Explain what design measures have been taken to ensure that the development proposal will be energy efficient.

The proposed development offers minimal opportunities for energy conservation due to the limited electricity required for the planned street lighting. However, energy-efficient lighting will be installed, and the lights should operate exclusively during nighttime hours.

Energy efficient building principles will be followed during the construction phase.

## SECTION J: REFERENCES

- Barbour, T. (2024) SOCIAL IMPACT ASSESSMENT REPORT IRT PHASE 2A WORK PACKAGE W8 CITY OF CAPE TOWN. rep. Cape Town: Barbour, pp. 1–93.
- Gibbs, D. (2024) IRT Phase 2A Work package 8: South Road, Plumstead Proposed Road Widening and Overpass: VISUAL IMPACT ASSESSMENT. rep. Cape Town: Gibbs, pp. 1–150.
- Urban-Econ Development Economists (Pty) Ltd (2024) ECONOMIC IMPACT ASSESSMENT FOR IRT PHASE 2A WORK PACKAGE 8. rep. Cape Town: Urban-Econ Development Economists (Pty) Ltd, pp. 1–98.
- von Reiche, N. (2025) Integrated Rapid Transport, Phase 2A, Trunk Route Section W8, South Road Environmental noise impact investigation. rep. Cape Town: Soundscape, pp. 1–70.
- O'Donoghue, B. (2024) CITY OF CAPE TOWN IRT INFRASTRUCTURE PHASE 2A: W8 OTTERTY, SOUTH, WESTBURY ROADS AND IMMEDIATE LOCAL CONTEXT PLUMSTEAD AND WYNBERG EAST CAPE TOWN HERITAGE IMPACT ASSESSMENT. rep. Cape Town: O'Donoghue, pp. 1–283.

- NCC (2023a) Terrestrial Biodiversity Compliance Statement: IRT Phase 2A Work Package 8. rep. Cape Town: NCC Environmental Services (Pty) Ltd, pp. 1–46.
- NCC (2023b) Aquatic Biodiversity Compliance Statement: IRT Phase 2A Work Package 8. rep. NCC Environmental Services (Pty) Ltd, pp. 1–39.
- HHO Consulting Engineers (2024) Contract 225C: Design and Construction Monitoring of IRT Phase 2A Infrastructure W8 South Road Detailed Geotechnical Investigation Report, rep. Cape Town: HHO Consulting Engineers, pp. 1–61.
- HHO Consulting Engineers (2024) Detailed Design Report Phase 2A IRT Infrastructure: Work package W8 South Road Traffic Report Extract, rep. Cape Town, Western Cape: HHO Consulting Engineers.
- HHO Consulting Engineers (2023) City Of Cape Town, Transport Infrastructure Design, Transport Infrastructure Implementation: 225c Design and Construction Monitoring of IRT Phase 2A W8 South Road: Conceptual Design Review Report. Rep. HHO Consulting Engineers, pp. 1–100.

## **SECTION K: DECLARATIONS**

## **DECLARATION OF THE APPLICANT**

**Note:** Duplicate this section where there is more than one Applicant.

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;
- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
- o meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
- meets all the requirements other than the requirement to be independent in terms of Regulation
   13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to
  - o costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP:
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
  - Legitimate costs in respect of specialist(s) reviews; and
  - the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

**Note:** If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

$\mathcal{A}$		
igues -	13/03/2025	
Signature of the Applicant:	Date:	
The City of Cape Town		
Name of company (if applicable):		

## DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I **Ingrid Eggert**, EAP Registration number **2019/805** as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed
  or was made available to registered interested and affected parties and that participation will be
  facilitated in such a manner that all interested and affected parties were provided with a reasonable
  opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;

Garat	13 March 2025
Signature of the EAP:	Date:
Associate to Chand Consultants Name of company (if applicable):	

## DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I **Michelle Lee**, EAP Registration number **2021/4150** as the appointed Candidate EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed
  or was made available to registered interested and affected parties and that participation will be
  facilitated in such a manner that all interested and affected parties were provided with a reasonable
  opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;

(MAS)		
	13 March 2025	
Signature of the EAP:	Date:	

Chand Consultants

Note: Duplicate this section where there is more than one specialist.

I Tony Baruzour as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and

I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

PROUR Environmental Consulhing

Note: Duplicate this section where there is more than one specialist.

## **David Gibbs**

I ......, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Spljitts	2025-03-04
Signature of the Specialist:	Date:

David Gibbs Landscape Architect | Environmental Planner + Heritage Practitioner

Mucayuma kaman as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

In terms of the general requirement to be independent:

Note: Duplicate this section where there is more than one specialist.

- o other than fair remuneration for work performed in terms of this application, have no business. financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
- o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and 1&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Signature of the Specialist:

Date:

Urban - Econ Development Economists Pty Ltd

Name of company (if applicable):

# **DECLARATION OF THE REVIEW SPECIALIST**

Hexandra Kempthorne as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s):
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the
  Department and I&APs, all material information that has or may have the potential to influence
  the decision of the Department or the objectivity of any Report, plan or document prepared as
  part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the Review Specialist:

11/03/2025 Date:

Vrban — Econ Name of company (if applicable):

Development Economists Pty

Note: Duplicate this section where there is more than one specialist.

Nicolette von Reiche appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

J Qualy.	2025/03/04	
Signature of the Specialist:	Date:	
Soundscape Consulting (Pty) Ltd		
Name of company (if applicable):		

Note: Duplicate this section where there is more than one specialist.

B.E.ODONOGHUE appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

30 Don	Mul	11 Man	W 2025
Signature of the Sp		Date:	
RPIN GOT	10th ON 10/4H1 #	ADIHITETE LATONA	14

Note: Duplicate this section where there is more than one specialist.

I ... Sean Altern ......, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

- Hall dise decidiations an offend	ce in ferms of Regulation 40 of the Liz Regulations.
Signature of the Specialist:	Date:
NCC Environmental Services (Pty) Ltd	

Note: Duplicate this section where there is more than one specialist.

Craig Burne, as the appointed Special the information provided or to be provided as part of the	list hereby declare/affirm the correctness of application, and that:
<ul> <li>In terms of the general requirement to be independed on the standard of the stand</li></ul>	n terms of this application, have no business, ment proposal or application and that there
<ul> <li>am not independent, but another specialist (the requirements set out in Regulation 13 of the NEI review my work (Note: a declaration by the revie</li> </ul>	MA EIA Regulations has been appointed to
<ul> <li>In terms of the remainder of the general requireme process met all of the requirements;</li> </ul>	nts for a specialist, have throughout this EIA
<ul> <li>I have disclosed to the applicant, the EAP, the Reviet I&amp;APs all material information that has or may have the Department or the objectivity of any Report, plan of part of the application; and</li> </ul>	he potential to influence the decision of the
I am aware that a false declaration is an offence in t	erms of Regulation 48 of the EIA Regulations.
Burne	04 March 025
Signature of the Specialist:	Date:

**BASIC ASSESSMENT REPORT: APRIL 2024** 

NCC Environmental Services (Pty) Ltd

Trevor O'Donoghue	as the appointed Specialist hereby declare/affirm the correctness of
	be provided as part of the application, and that:

• In terms of the general requirement to be independent:

Note: Duplicate this section where there is more than one specialist.

- o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
- o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

	4 March 2025
Signature of the Specialist:	Date:
NCC Environmental Services (Pty) Ltd	
Name of company (if applicable):	

Note: Duplicate this section where there is more than one specialist.

- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

RA H	O	C
Harvill	12-03-2	2025
Signature of the Specialist:	Date:	
HHO Consulting Engineers		
Name of company (if applicable):		

DE	ECLARATION OF THE REVIEW SPECIALIST						
l de	Brentt Mossick eclare/affirm that:	as	the	appointed	Review	Specialist	hereby
•	I have reviewed all the work produced by th	e Sp	ecialis	t(s):			
•	I have reviewed the correctness of the speci	alist i	nform	ation provide	ed as part	of this Repo	ort;
•	I meet all of the general requirements of sp Reaulations:	ecia	lists as	set out in Re	egulation	13 of the N	EMA EIA

- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

	12 March 2025
Signature of the Review Specialist:	Date:
HHO Consulting Engineers	

DE	ECLARATION OF THE REVIEW SPECIALIST						
l de	Brentt Mossick eclare/affirm that:	as	the	appointed	Review	Specialist	hereby
•	I have reviewed all the work produced by th	e Sp	ecialis	t(s):			
•	I have reviewed the correctness of the speci	alist i	nform	ation provide	ed as part	of this Repo	ort;
•	I meet all of the general requirements of sp Reaulations:	ecia	lists as	set out in Re	egulation	13 of the N	EMA EIA

- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

	12 March 2025
Signature of the Review Specialist:	Date:
HHO Consulting Engineers	

Note: Duplicate this section where there is more than one specialist.

I .Lihan.van.der.Merwe......, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
  - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

fill	13 March 2025
Signature of the Specialist:	Date:
HHO Consulting Engineers	
Name of company (if applicable):	