

## EXECUTIVE SUMMARY

### BACKGROUND AND PROJECT OVERVIEW

Fairview Suburban Estate Company (Pty) Ltd (the applicant) received a positive Environmental Authorisation (EA) for the Residential and Mixed Use Development of the Remainder of Erf 1082, Fairview, Nelson Mandela Bay Municipality, from the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), on 9 May 2012 (DEDEAT reference no ECm1/387/M/07-169). This EA followed the submission of a Final Environmental Impact Assessment Report (Final EIA), dated March 2011, by Public Process Consultants, the independent Environmental Assessment Practitioner (EAP) appointed by the applicant. Subsequent to the receipt of the EA, dated 9 May 2012, the following amendments have been issued by DEDEAT:

- Amendment Notice 1, 24 August 2012 (non-substantive amendment).
- Amendment Notice 2, 6 November 2012 (substantive amendment, which supersedes the original EA, dated 9 May 2012).
- Amendment Notice 3, 27 May 2013 (non-substantive amendment)
- Amendment Notice 4, 17 January 2017 (non-substantive amendment)

The applicant proposes to consolidate, subdivide and rezone Phases 5 and 6 of Erf 1082 from Residential 2 (Private Open Space and Transportation (access)) **to** Special Purposes (High Tech/ Industrial Business Park and Transportation (roads)). The EA for Erf 1082 contains the following condition, amongst others:

*“3.2.7. Any changes to, or deviations from the project description set out in this Environmental Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of this Environmental Authorisation to apply for further authorisation in terms of the regulations.”*

Correspondence from DEDEAT, dated 5 September 2017, confirmed that the “...rezoning and subsequent change in use of the relevant portions would require an amendment application and authorisation for such prior to the rezoning coming into effect; and 4) That such an amendment is viewed as substantive the Department (especially considering the portions in question are adjacent to the Public Open Space which forms a riverine corridor to the Baakens River. This must therefore be addressed through an amendment application made in terms of Sections 31 and 32 of the NEMA EIA Regulations, 2014, which must be subjected to a public participation process as prescribed by the Regulations.”

This Amendment Application and associated Final Amendment Report (Final AR) is thus a substantive application for the amendment of an existing EA and is being undertaken in terms of Sections 31 and 32 of the NEMA EIA Regulations, 2014 (as amended). The applicant has appointed Public Process Consultants as the independent EAP to manage the Amendment Application (AA) and associated Public Participation Process.

### PROPOSED REZONING AMENDMENT OVERVIEW

The applicant proposes to consolidate, subdivide and rezone Phases 5 and 6 of Erf 1082 from Residential 2 (Townhouses), Private Open Space and Special Purpose (Access and Internal Roads) **to** Special Purposes (High Tech/ Industrial Business Park) and Transportation 1 (Roads). **The total development area of 8.19ha is not proposed to change.**

The table below provides a comparative overview of the proposed rezoning.

ZONING	CURRENT ZONING IN HA	PROPOSED ZONING IN HA	DIFFERENCE
Residential 2 (Townhouses) - 109 units <b>to</b> Special Purposes (High Tech/ Industrial Business Park) - 28 erven	6.24	7.23	+0.99
Private Open Space	0.52	0	-0.52
Special Purpose (Access and Internal Roads) <b>to</b> Transportation 1 (Roads)	1.42	0.96	-0.46
<b>TOTAL</b>	<b>8.19</b>	<b>8.19</b>	

Based on the proposed rezoning of Phases 5 and 6 from Residential 2 to Special Purposes the following specialist studies have been undertaken as part of the Amendment Application Process:

- Ecological Assessment, to include:
  - Aquatic Assessment – to, amongst others, assess the impacts of increased stormwater runoff on the Lorraine Tributary which forms part of the Baakens River and make appropriate recommendations for stormwater management.
  - Vegetation Assessment Review – to review the assessment of impacts associated with the proposed change in zoning, on the vegetation on Phases 5 and 6.
- Bulk Services – review of the bulk services for Phases 5 and 6, based on the proposed change in zoning, changes in stormwater runoff and management thereof, domestic water consumption, effluent generation and electricity demand.
- Traffic Assessment – revision of the traffic assessment for Phases 5 and 6 based on the change from Residential 2 to Special Purposes.
- Review of the EMPr

The proposed rezoning would result in the following changes to Phases 5 and 6:

- 28 Special Purpose (High Tech/ Industrial Business Park) erven of 7.23ha, **previously** 109 Residential 2 (Townhouses) erven of 6.24ha.
- Private Open Space of 0.52ha **to be incorporated** into Special Purpose (High Tech/ Industrial Business Park) and Transportation 1 (Roads) zoning.
- Transportation 1 (Roads) zoning of 0.96ha, **previously** Special Purpose (Access and Internal Roads) of 1.42ha.
  - Overall reduction in road surface area and length, which will result in a reduction in maintenance and life cycle costs.
- Relaxation of 30% of the area to be set aside for landscaping.
- Relaxation of side and rear building lines from 5m to 2.5m but maintain street frontage at 5m.
- Main access off existing recently upgraded Circular Drive, Fern and Willow Road. Slight change in position of the access for Phase 5 along Fern Road, westwards.
- Stormwater to discharge overland into the adjacent Baakens River tributary, for erven 1 to 10. The remaining erven will discharge through a piped stormwater network into the Public Open Space on the north eastern boundary of the site and will eventuate into the Baakens River via the defined water course. **Previously** three (3) discharge points were proposed.
  - The overall increase in hard surfaces due to the proposed zoning changes will result in shorter times of concentration in major storm events, thus increasing the stormwater runoff from the area under consideration. An additional 0.7m<sup>3</sup>/s will be generated for both the 1:50 and 1:100-year storm events. However, the rezoning will have no effect on the 1:100-year floodline previously determined, as the additional runoff is considered negligible.
- Water supply via the existing 250mm diameter main in Fern Road. The additional Annual Average Daily Demand (AADD) is estimated at 94Kl/day, translating to an AADD of 203Kl/day. No change required, except internal reticulation in line with erven. However, the overall length of water main pipelines required to service the proposed Special Purpose (High Tech/ Industrial Business Park) erven will be significantly shorter, which will result in a reduction in maintenance and life cycle costs.
- Effluent to flow via internal 160mm diameter pipes, still required to be constructed, into the existing bulk 250mm diameter foulsewer and ultimately into the existing 600mm diameter Baakens River Bulk Sewer pipeline. No change for discharge into existing main foulsewer pipes, only internal reticulation in line with Special Purpose (High Tech/ Industrial Business Park) erven. Peak dry and wet weather flow for effluent will not be affected by the proposed rezoning.

See Chapter Two of the Report for further detailed information regarding the project description and town planning motivation for the proposed rezoning.

#### **SUPPLEMENTARY BULK SERVICES REPORT**

The supplementary bulk services report prepared by Hatch Africa (Pty) Ltd concludes the following with regards to the roads and wet services required for the proposed rezoning:

- **Sufficient capacity exists in existing roads, wet services and electricity supply to support the proposed rezoning of Phases 5 & 6 of the development to Special Purposes use.**
- The revised plan layout for the rezoning to special purposes will reduce both road length and surfaced area which will have a positive impact on maintenance and life cycle costs.
- Because the road lengths and surfaced road area will be reduced from what was proposed under the residential zoning the maintenance and life cost cycle of the stormwater infrastructure will also be reduced.
- An increase in the hard surfaces which will result in shorter times of concentration in major storm events, is anticipated to increase the stormwater runoff from the area under consideration. An additional 0.7 m<sup>3</sup>/s will be generated for both the 1:50 and 1:100-year storm events. The rezoning will have no effect on the 1:00 year floodline previously determined as the additional runoff is considered negligible.
- The additional Annual Average Daily Demand for water required in terms of the Guideline for the proposed rezoning to Special Purpose is relatively minimal and equivalent to the AADD of an additional 94 residential erven (additional 94Kl/day).
- It should be noted that the length of water main pipelines required to service the Special Purposes Erven will be significantly shorter and will therefore require less maintenance during its life cycle.
- Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWPF) for effluent will not be affected by the proposed rezoning to Special Purposes.

See Chapter Four of the Report for further detailed information regarding the bulk services assessment.

#### **ECOLOGICAL SPECIALIST ASSESSMENT**

##### ***Aquatic Environment***

In this assessment various watercourses were confirmed in the regional and study area landscape, but no natural systems were observed directly within the site. The site is, however, directly adjacent to a tributary of the Baakens River but located outside of the 1:100-year floodline. No direct impact on any natural aquatic systems is anticipated assuming that no activities are located within the 1:100-year floodline or riparian zone and buffer, whichever is larger, i.e. the status quo of the current site should be unaffected.

These systems, their current state and functionality were evaluated against the previous impact assessment and the proposed layout amendment, and with the exception of 1 impact, **all previous impacts related to the riparian/ aquatic environment could be upheld, i.e. the layout revision will not present an increase in the significance of any impacts and post-mitigation would still remain LOW or VERY LOW.**

Only one impact, namely **Disruption of Ecological Corridors, Patterns and Process** required reevaluation, as the revised layout and alterations to the stormwater management system would result in a lower or reduced impact significance, thus the MODERATE (-) impact was rated as VERY LOW (-) based on the amendment changes.

The stormwater management plan has now consolidated all discharge structures into one area and will no longer discharge into the 1:100-year flood line. In order to prevent issues such as erosion/ sedimentation, and to trap any solid waste from entering any downstream areas it is recommended that the following **additional condition** be included in the amended Environmental Authorisation, should one be granted:

- **An amended layout plan for the roads and wet services for Phase 5 and 6, based on the layout plan titled “Subdivision of Erf 1082, Fairview Stage 3 Preliminary Design of Roads and Wet Services” with drawing number H115868-AS-001 Rev A, by Hatch Africa, is to be submitted to DEDEAT for approval prior to the commencement of construction. The layout should clearly indicate the placement of erosion control and velocity dissipation structures, as well as suitably sized stilling basins into the single discharge point for Phase 5 and 6.**

### **Terrestrial Vegetation**

In terms of the current approved zoning, all of the existing vegetation on the site (Phase 5 and 6) would be cleared to allow for the construction of the houses, roads and Private Open Space areas. This would still be the case, should the zoning of the site be changed as proposed. **No significant advantages or disadvantages of the proposed zoning changes have been identified, from a biophysical perspective. The impacts that were previously identified, which relate to the vegetation and associated habitat, are deemed to still be applicable and are not anticipated to change.** All mitigation measures previously proposed, as well as the associated conditions in the current Amended Environmental Authorisation are still applicable.

Impacts associated with the increased risk of introduction of exotic flora and the potential spread thereof into the surrounding indigenous vegetation, in particular the Open Space areas, during the operational phase, might have a slightly lowered significance, should the zoning change. This opinion is based on the fact that fewer ornamental gardens associated with the proposed rezoning would possibly result in a lower risk of introduction and spread of exotics.

As per the existing Environmental Authorisation, a faunal and floral search and rescue must be undertaken prior to commencement of vegetation clearing on site (Condition 3.3.13 and 3.3.15 of Amendment Notice 2). Also of importance, is the condition to fence off the No-Go (open space areas) area adjacent to the proposed development footprint - to the north and east – prior to commencement of clearing activities to ensure that these areas are not damaged or disturbed during the construction phase (Condition 3.3.3.3 in Amendment Notice 2 and Condition 3.7 in Amendment Notice 4).

See Chapter Five of the Report for further detailed information regarding the ecological impact assessment.

### **TRAFFIC IMPACT ASSESSMENT ADDENDUM**

The Addendum to the Traffic Impact Assessment prepared by Royal HaskoningDHV concludes the following with regards to the traffic impacts anticipated for the proposed rezoning:

- The proposed Special Purpose land-use, consisting of 28 individual erven, will be 9 886m<sup>2</sup> larger in size than the Residential 2 land-use originally proposed, which consisted of 109 individual erven. However, the original development footprint for Phase 5 and 6 remains the same as assessed in the original EIA (8.19ha).
- The Residential 2 land-use would generate a total of 120 vehicle trips in both the weekday AM and PM peak hours. The Special Purpose erven would generate a total number of vehicle trips ranging from 199 vehicles to 305 vehicles during the weekday peak traffic hours, depending on the calculation approach adopted, for a GLA of 22 075m<sup>2</sup> and a 30.5% coverage. The proposed change in land-use will therefore lead to an increased vehicle trip generation to/from this part of the development.
- Inspection of the SIDRA capacity analysis results contained in the 2010 TIA for the 2020 ultimate scenario (all Erf 1082 land-uses fully developed) indicate that the newly upgraded traffic circles at Circular Drive / Fern Road (Access B) and Willow Road / Mimosa Road would operate with minimal traffic congestion and delay, and that **adequate spare capacity should be available to accommodate the additional traffic generated by the proposed change in land-use. No further upgrading is therefore considered necessary at these two traffic circles.**
- The directional split of vehicle traffic for both land-use types is 75:25 inbound : outbound during weekday peak traffic hours.
- The residential road layout internal to Phases 5 and 6 will be changed in accordance with the new erf layout, with two access intersections proposed on Fern Road.
- The road reserve width will be increased from 10m to 15m to accommodate wider roads capable of accommodating the turning movements of larger heavy vehicles.
- All identified traffic impacts can be sufficiently mitigated.

See Chapter Six of the Report for further detailed information regarding the traffic impact assessment.

### **PUBLIC PARTICIPATION**

The following section of the report provides details of the Public Participation Process undertaken for the Amendment Application. The assessment process being implemented can be divided into three phases namely:

- **Phase 1: Pre-Application and Project Announcement**
  - Communication with DEDEAT and Authorities
  - Project Announcement and Registration of I&APs (30 days)
  - Specialist Studies

- **Phase 2: Application Form and Amendment Report**
  - Submission of Amendment Application Form to DEDEAT
  - Draft Amendment Report Review (30 days)
  - Submission of Final Amendment Report to DEDEAT ([We Are Here](#))
- **Phase 3: Decision Making and Appeal Period**

The Amendment Application Process is currently at the stage where an Amendment Application Form has been submitted to the competent authority, DEDEAT. In parallel to the submission thereof, the Draft Amendment Report (Draft AR) was released for a 53-day comment period, extending from **19 November 2018 to 11 January 2019**. The comment period was extended from the minimum legislated 30-day comment period because, in terms of the NEMA EIA Regulations 2014 (as amended), **no public participation may be conducted during the period from 15 December to 5 January**. The comments raised by I&APs on the Draft AR have been included in the Final AR to be submitted to DEDEAT for their decision making.

The following provides a summary of the issues raised during the project announcement phase, as well as during the review of the Draft AR. The number in brackets indicates the number of times a specific issue has been raised by I&APs during the Amendment Application Process:

- Traffic Impacts (2)
- Noise Impacts (2)
- Pollution Impacts (1)
- Ecological Impacts (6)
- Socio-Economic Impacts (4)
- Public Participation Process and Amendment Application (8)

The issues raised have been included in the Comments and Responses Trail in Chapter Three of the Report and copies of these comments are included in Appendix F. No comments have been received from I&APs which have required additional specialist studies to be undertaken as part of the Amendment Application Process.

For more information regarding the proposed amendments see Chapter Seven of the Report.

#### CONCLUDING REMARKS

- The potential impacts of the proposed amendments regarding rezoning of Phases 5 and 6 of Erf 1082 Fairview do not differ significantly from those originally assessed in the Final EIA Report (2011) for the project.
- The most significant changes that have been identified, include the incorporation of the 0.52ha of Private Open Space into Special Purposes (High Tech/ Industrial Business Park) and Transportation 1 (Roads) zoning.
- An increase in the anticipated Annual Average Daily Water Demand by 94KI/day.
- An increase in the number of vehicle trips to be generated, ranging from 79 to 185 more vehicles travelling to/ from this part of the development, during weekday peak traffic hours.
- The relocation (westwards) of one of the proposed access points off Fern Road.
- The stormwater management plan has now consolidated all discharge structures (previously three (3)) into one (1) area and will no longer discharge into the 1:100-year flood line.
- An overall reduction in road surface area and length, which will result in a reduction in maintenance and life cycle costs.
- The overall increase in the hard surfaces due to the proposed zoning changes will result in shorter times of concentration in major storm events, thus increasing the stormwater runoff from the area under consideration. An additional 0.7 m<sup>3</sup>/s will be generated for both the 1:50 and 1:100-year storm events. However, the rezoning will have no effect on the 1:00 year floodline previously determined, as the additional runoff is considered negligible.

The following additional conditions are recommended by the relevant specialists to be included in an Amended Environmental Authorisation, should one be granted:

- An updated Traffic Impact Assessment, indicating the necessary road upgrades for Phases 7 through to 13, prior to the commencement of construction.
- An amended layout plan for Phases 5 and 6, based on the layout plan titled "*Proposed Subdivision & Rezoning of Portion of the Remainder of Erf 1082 Fairview*", with Drawing Number 16007\_Fai – 08 (Rev3), dated 02/11/2018, by Metroplan Town and Regional Planners, as included in the Amendment Report, to be submitted to DEDEAT for approval prior to the commencement of construction. Such layout plan to include the layout of Phases 5 and 6 (as per Section 2 of the current Amended Environmental Authorisation) and such layout to conform to the layout as included in Appendix G in the Amendment Report.
- An amended layout plan for the roads and wet services for Phases 5 and 6, based on the layout plan titled "*Subdivision of Erf 1082, Fairview Stage 3 Preliminary Design of Roads and Wet Services*", with drawing number H115868-AS-001 Rev A, by Hatch Africa, is to be submitted to DEDEAT for approval prior to the commencement of construction. The layout should clearly indicate the placement of erosion control and velocity dissipation structures, as well as suitably sized stilling basins into the single discharge point for Phases 5 and 6.
- The approved EMPr must be updated to include the abovementioned additional conditions.