| Project Name: Boegoeberg Housing Development | | | | Nature of Impact | | | | Without Mitigation (Baseline) | | | | | ithout With Mitigation | | | | | |
|--|-------------------------|-----------------|----------------------|------------------|---|---|-----------------------------|-------------------------------|-------------------------|---------------------------------------|---|-----------------------------------|----------------------------|----------|-------------------------|--------------------------|---|---|
| Tojecti | ame. Doegoese | ig rious | ing Development | Number | Aspect | Impact | Probability (Likelihood) | Extent | Duration (Frequency) | Magnitude (Intensity/ Severity) | Receiving Environment (Consequence) | Mitigation Score (Baseline) | Probability (Likelihood | Extent | Duration (Frequency) | Magnitude (Intensity/ | Receiving Environment (Consequence) | With Mitigation Score (Impact Assessment) |
| EN | VIRONMENTAL RATING | SIGNIFICAN | CE KEY | | | CONSTRUCTION PHASE | | | | | | | | | | | | |
| | | | | 1 | | Geology & soils | -4 | -2 | -2 | -4 | -4 | -4 | -2 | -2 | -2 | -4 | -2 | -3 |
| | | | Final rating score / | 2 | | Land-use and cover | -8 | -2 | -2 | -4 | -4 | -4 | -4 | -2 | -2 | -4 | -2 | -3 |
| cts | SIGNIFICANCE | RATING | value range | 3 | | Vegetation status | -8 | -2 | -2 | -8 | -8 | -6 | -4 | -4 | -2 | -2 | -2 | -3 |
| Positive Negative Impacing | | | >11 to -16 | 4 | Botanical | Conservation priority: | -8 | -2 | -2 | -8 | -4 | -5 | -4 | -2 | -4 | -2 | -2 | -3 |
| | Very Significant | Very High | 71110-10 | 5 | | Connectivity: | -8 | -2 | -2 | -8 | -4 | -5 | -4 | -2 | -2 | -4 | -2 | -3 |
| | Significant | | >-7 to -11 | 6 | | Watercourses and wetlands | -8 | -2 | -2 | -8 | -8 | -6 | -4 | -2 | -2 | -4 | -2 | -3 |
| | | High | | 7 | | Protected & endangered plant species: | -8 | -4 | -4 | -2 | -2 | -4 | -4 | -2 | -2 | -4 | -2 | -3 |
| | Increasing Significance | Medium | >-4 to -7 | 8 | | Invasive alien plant species | -8 | -4 | -4 | -2 | -2 | -4 | -4 | -2 | -2 | -2 | -2 | -3 |
| | Insignificant | Low | -2 to -4 | 9 | | Veld fire risk | -4 | -2 | -2 | -2 | -2 | -3 | -2 | -2 | -2 | -2 | -2 | -2 |
| | morgimiount | Very Low | -1 to <-2 | 10 | | Cumulative impacts | -8 | -2 | -2 | -8 | -8 | -6 | -4 | -2 | -2 | -4 | -2 | -3 |
| | | RATING High | | 11 | l | The "No-Go" option | -8 | -2 | -2 | -4 | -4 | -4 | 0 | 0 | 0 | 0 | 0 | 0 |
| | SIGNIFICANCE | | Final rating score / | 12 | Heritage | Lithic occurrences | -4 | -2 | -2 | -2 | -2 | -3 | -2 | -2 | -2 | -2 | -2 | -2 |
| | ^ | | value range | 13 | Heritage | Boegoeberg cemetery, situated outside of the development footprint. | -4 | -2 | -2 | -2 | -2 | -3 | -2 | -2 | -2 | -2 | -2 | -2 |
| | Significant | | 10 to 16 | 14 | Palaeontology | Palaeontological significance (low) | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 |
| | Ingressing Cignificance | | 44- 440 | 15 | | Construction of dwellings around the drainage line. Destruction of the | -8 | -4 | -2 | -16 | -8 | -8 | -2 | -2 | -2 | -2 | -2 | -2 |
| | Increasing Significance | Medium Low | 1 to 41 | 16 | Freshwater | Cumulative impact of sewage and solid waste | -8 | -4 | -2 | -8 | -8 | -6 | -4 | -2 | -2 | -4 | -2 | -3 |
| | ∟ Insignificant | | | 17 | | Stormwater management | -4 | -2 | -2 | -4 | -4 | -4 | -4 | -2 | -2 | -4 | -2 | -3 |
| | | | | 18 | Soil | On site erosion due to improper management of stormwater during construction. Exposed platforms and trenches excavated for any pipeline are susceptible will be susceptible to erosion during the construction phase. | -8 | -2 | -2 | -8 | -8 | -6 | -4 | -2 | -2 | -4 | -2 | -3 |
| | | | | 19 | • | Erosion and safety hazards associated with excavated pipelines which are not backfilled. | -8 | -2 | -4 | -8 | -4 | -6 | -2 | -1 | -2 | -8 | -2 | -3 |
| | | | | 20 | Watercourse | Sedimentation of drainage line due to the uncontrolled stormwater runoff naturally flowing towards the drainage line. | -2 | -2 | -8 | -16 | -4 | -7 | -1 | -2 | -2 | -8 | -2 | -3 |
| | | | | 21 | Waste | Insufficient number of toilets and / or inappropriate disposal of sewage generated during the construction phase. | -8 | -4 | -2 | -8 | -4 | -6 | -2 | -1 | -2 | -4 | -2 | -3 |
| | | | | 22 | Waste | Temporary increase in waste and litter contaminating the receiving environment (including the Gariep Canal) | -8 | -4 | -2 | -4 | -4 | -5 | -4 | -2 | -2 | -2 | -4 | -3 |
| | | | | 23 | Socio-economic | Creation of short-term employment opportunities during the construction phase. | 8 | 2 | 2 | 4 | 2 | 4 | 8 | 2 | 2 | 4 | 2 | 4 |
| | | | | 24 | Dust | Dust will be generated during the construction of the proposed development which may impact drivers and commuters. | -8 | -4 | -2 | -8 | -2 | -5 | -4 | -2 | -2 | -2 | -4 | -3 |
| | | | | 25 | Visual | Site may be not aesthetic amid natural background. | -16 | -2 | -16 | -4 | -2 | -8 | -4 | -2 | -2 | -2 | -4 | -3 |
| | | | | 26 | Noise Unsustainable sourcing of raw materials | Noise will be generated during the construction phase. Illegal sourcing of raw materials, such as gravel, sand, water etc. promoting illegal mining operations causing significant damage to the environment. | -8 -8 | -2 -4 | -2 -8 | -4 -8 | -4 -8 | -4 -8 | -4 -2 | -2 -1 | -2 -4 | -2 -8 | -4 -4 | -3 -4 |
| | | OPERATION PHASE | | | | | | | | | | | | | | | | |
| | | | | 28 | Water supply | Increased pressure on water source for water supply. | -8 | -4 | -1 | -8 | -8 | -6 | -4 | -4 | -1 | -4 | -4 | -4 |
| | | | | 29 | Sewage management | Increased production of sewage which requires effective management | -16 | -4 | -8 | -16 | -8 | -11 | -8 | -2 | -2 | -4 | -2 | -4 |
| | | | | 30 | Solid waste management | Increased pressure on municipal waste removal services and illegal dumping of waste | -16 | -4 | -8 | -8 | -8 | -9 | -8 | -2 | -2 | -4 | -2 | -4 |
| | | | | | DECOMMISSIONING AND CLOSURE PHASES | | | | | | | | | | | | | |
| | | | | 31 | Waste | Demolition of infrastructure resulting in waste accumulation on-site and surrounding area. | -16 | -2 | -4 | -8 | -4 | -7 | -4 | -1 | -2 | -2 | -4 | -3 |
| | | | | 32 | Soil and water | Exposed soil becoming prone to erosion and sedimentation of the drainage line. | -8 | -2 | -8 | -8 | -4 | -6 | -2 | -1 | -2 | -4 | -4 | -3 |