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**WILDLIFE AND  
ENVIRONMENT  
SOCIETY OF SA**  
*People caring for the Earth*

18 April 2008

Mr P. Roux

Turgis Consulting, Fax. 011 476 2579.

**NORTHGATE PROPERTY DEVELOPMENT – EIA AND EMP REPORT**

Dear Peter

Thank you for the copy of the draft EIA and EMP reports on this development. Below are our comments on these reports. Our issues have been divided into 1) issues/concerns on the reports and 2) old issues previously raised, tabulated under issues not addressed and issues that were addressed. We are concerned that many of our issues were not addressed, inadequately addressed or misunderstood. We refer to the EIA and the Comment and Response Document Issue Trail of the Final Scoping Report (pg 149). We trust that these issues will all be clearly addressed in the final EIA report, as well as listed in an Issues and Response Table, and we will be afforded the opportunity to verify this before the RoD is issued, as we do not want to appeal the RoD if this can be prevented.

**1. Issues/concerns on the EIA and EMP reports**

***The EIA report***

- 1) The SR and EIA reports state that NCPIH has purchased the properties; yet we have been informed that the land owners have not yet sold the properties. The true situation needs to be stated in the EIA report.
- 2) Of major concern is that alternative sites were not further assessed in the EIA as requested and our suggestions for alternative sites were ignored. The location of a residential development can make a big difference to the environmental impact and therefore assessing alternative localities is necessary in an EIA such as this one. The preferred site is not the only option as, for example, in the case of proposed mine sites. As the properties have not yet been purchased, there is no reason why the other sites as suggested cannot be investigated, and no feasible reasons to the contrary are provided in the EIA. To re-iterate, clearly this greenfields development adjacent to Kamfers Dam, a Natural Heritage Site (of high biodiversity and conservation value), and an Important Bird Area (of international recognition), would have greater environmental impacts than developing a previously disturbed site or

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other site not linked to a sensitive site. Developing Northgate to the west (in sub-area 7 of the Spatial Development framework (SDF) – zoned for residential enhancement) or east (for e.g. in sub-area 14 of the SDF) of Kimberley would lead to sustainable environmental development. This would also be in line and in legal compliance with the SDF of the Sol Plaatje Municipality (SPM), and not in contravention of these plans. In the SDF (Vol. 3, available at [www.solplaatje.org.za](http://www.solplaatje.org.za)) more than half of the Northgate area is zoned in sub-area 31 (zoned as the National heritage – Kamfers Dam Flamingo conservancy for conservation, pg. 74) and the western portions are in sub-area 32 (zoned to support tourism and hospitality for the Kamfers Dam conservancy, pg. 76). These sub-areas are *not* zoned for residential developments. As the SDF is a legally required document forming the foundation of a municipality's IDP, all planning decisions on development applications must be based on the extent the application conforms with and gives effect to the SDF. The IDP binds the SPM in the exercising of its executive authority (sect. 35 of the Municipal Systems Act, Act 32 of 2000).

- 3) We strongly recommend the detailed assessment of two valid alternative sites (not sites for which EIAs and plans already exist) besides the no-go option and the Northgate preferred alternative of low-density, phased development.
- 4) Fragmentation of habitats was not addressed under the impact assessment section.  
Developing around Kamfers Dam (KD) without leaving a natural, undisturbed biodiversity corridor for biota movement to the north will form an 'island', an isolated fragment of habitat that comprises the KD ecosystem. This could have national and international scale impacts over the long term. We note that there is mention of buffer zones and vegetation corridors in the EIA and EMP, but we would like to see these as well as a northwards biodiversity corridor mapped (with specialist input) in the development layout plan. This is to enable connectivity between habitats that maintain biota movement and biodiversity beyond the site boundary. The final detailed development layout for each phase should be planned around these buffer zones and corridors.
- 5) The sensitivity of the KD ecosystem (pg 66) refers. KD and its pan fringes are mapped by Mucina and Rutherford (2006) under the Highveld Salt Pans vegetation type (Azi10). This as well as the fact that it is a Natural Heritage Site and an Important Bird Area of international recognition should also be mentioned here. KD cannot be assessed broadly under the Kimberley Thornveld vegetation type or even more broadly at a biome level (savanna biome). Although the proposed development site is in the Kimberley Thornveld that may be less sensitive and least threatened, it will impact on the connected KD ecosystem that is a natural asset of international significance. The drainage line from its source on portion 42 of farm 70 through portion 16 of farm 70, should be mapped as part of the pan ecosystem. Also, the loss/transformation of this section (through constructing artificial storm water dams etc.) further reduces the percentage of the KD ecosystem remaining intact. A significant percentage of the KD ecosystem and catchment area has already been transformed. To provide a better idea of the impacts of fragmentation on this ecosystem, the EIA should state the % already transformed and how much would remain intact

once the drainage line is also transformed.

6) Faunal impacts - local/widespread scale of impacts (pg 73):

We disagree with the statement that impacts will be at a local scale. Any impacts on Kamfers Dam would be at a national scale (widespread) as it is an Important Bird Area and Natural Heritage Site. This scale of impact was stated in M de Villiers' specialist report, as well as the fact that impacts on the Lesser Flamingo would be of international significance. She also stated that there will be low impacts and residual impacts even with mitigation at a national and international scale.

7) Conclusion section – 11.1 Biophysical:

It is stated that 'of significant importance is that the impacts will be localized to the development footprint and local area'. This is true for some impacts, but more importantly it is of significant importance that some of the impacts could be of national and international significance (with and without mitigation). For example, even with mitigation, fragmenting the Kamfers Dam ecosystem further or causing its total isolation if no northwards biodiversity corridor is left intact could cause impacts of national and international significance.

8) In the table (under sect. 7.3.6.1, pg 35) ranking the HWTP upgrade as positive (under cost), it states that the contribution by the developers to the HWTP upgrade can be seen as a *biodiversity offset*. This is not true, it is a *mitigation measure*. Refer to our comments that explain what is considered to be a biodiversity offset.

9) We requested that it must be stipulated exactly how much the Northgate development will contribute to the upgrade of the HWTP and if there is enough funding from the municipality and other sources to cover the total cost. You state in the FSR that you are unsure that this forms part of the EIA, which you state is to assess the impact of the non-upgraded plant versus the upgraded plant. We think our point was misunderstood and it does form part of the EIA. In the EIA there should be a commitment to a specific amount of financial contribution for the essential HWTP upgrade and a verification (from SPM) that there will be enough funding overall to upgrade it before development. The developers must mitigate their exacerbation of the already high impacts of a non-upgraded plant; and therefore it must be upgraded and the costs of this mitigation (as listed for others like the perimeter wall) must also be detailed in the EIA.

10) The final development layout plan (all phases) needs to be appended to the EIA report. The FSR stated that a final detailed development plan would be included in the EIA.

11) Social impact assessment: Has the informal settlement (shanty town) community been informed about the planned development and how it will have an impact on them? Were they part of the SIA survey and how did they respond to the fact that they would have to move? Can any of them afford to rent or buy into Northgate? Is this shanty town on one of the proposed Northgate properties or not; this is unclear as contradicting information is provided in the SR and issue response.

12) Ground water: The specialist report discusses the possibility that ground water could be contaminated and pollutants could flow along the drainage line into Kamfers Dam. Should the suggested borehole monitoring show that the ground water is contaminated, what preventative actions can/will be taken? These must be listed in the EMP.

Should the three containment dams overflow into the drainage channel during periods of high rainfall, what preventative action will be taken to prevent this contaminated water reaching and polluting Kamfers Dam? If nothing can be done then alternative storm water runoff diversion elsewhere (out of the Kamfers Dam catchment) must be investigated, designed and added to the EMP.

13) Outstanding comments from state authorities that need to authorize aspects of the EIA, namely the Dept. of Agriculture (rezoning approval), Spoornet (railway line crossing) and SAHRA (comments on heritage study) must also be appended to the final EIA.

### ***The EMP report***

1) The perimeter security wall maintenance provisions are not included. Furthermore, who will fund the permanent security camera monitoring system and its maintenance? Will the developers or home owners through a levy?

2) Economic issues and their control - 5.1 Biodiversity Offsets:

As mentioned before, these measures are not all biodiversity offsets and need to be listed under two separate sections – mitigating measures and biodiversity offset agreement. Points a) to c) are mitigating measures, d) & e) are tourism offsets, and point f) is a possible biodiversity offset. The investigation into appropriate biodiversity offset options should also be detailed in the EIA report. A negotiated agreement with the FET on the planned financial donations to protect Kamfers Dam should be appended to the EIA and EMP to secure a biodiversity offset commitment. The Eco Centre management and suggested game wardens to protect Kamfers Dam are concerns the FET raised (in its comments of 8/02/2008) that still need resolution. The FSR states that the FET has not indicated whether they wish to receive funds/the Eco Centre or not, but we understand from the FET's correspondence that they will not have the capacity to manage the Eco Centre or game wardens and do not agree with those particular offers. FET did not disagree with the proposed financial contribution towards conservation.

3) Recommendations in the SIA (sect 9, pg 36-38) listed specifically for the EMP are not all included in the EMP, and so these impacts will not be mitigated because these recommendations will not be implemented (for e.g. the employment guidelines). All recommendations need to be added to the EMP.

4) The final development layout plan (all phases) needs to be appended to the EMP report as this is what the ECO and contractors will be referring to and must comply with.

## 2. Previous issues and concerns raised.

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The following table lists the issues and concerns raised from the start of the project. Some of the issues that still need to be addressed overlap with the issues discussed above.

Issue/concern raised	Date	Response in FSR/EIA
<b>Issues not addressed or inadequately addressed:</b>		
1. Assess alternative sites. Valid alternative sites would include municipal or private property along the urban edge for which there are presently no applications/approvals. For example, private property next to and opposite the new Mental Health Facility west of Kimberley could be an alternative..... Or areas near Kenilworth, close to industries, the city centre, taxi routes, and if these areas are already disturbed then there will be far less negative impact on the environment. Guidelines to urban development recommend that residential development is rather located on previously disturbed areas and this development must be in line with the municipality's SDF for legal compliance.	31/01/08	Valid alternative sites not addressed in EIA. The FSR stated that this would be done in the EIA. Alternative technologies (electricity & sewage) and alternative design (density) and scale were assessed.
2. The evaluation of the environmental factors of the alternative sites is not adequate. These should not only compare a few factors to the Northgate site, but also consider the sensitivity of the receiving natural environment, land-use capability, whether it is disturbed or undisturbed (greenfields), within a threatened ecosystem or not, bordering on sensitive or threatened ecosystem or in a drainage area.	31/01/08	Not addressed, as valid alternative sites were not investigated in EIA even though FSR stated this would be done.
3. Under the Economic factors (1.9.4 DSR), financial figures of the cost/benefit analysis for bulk infrastructure supply should be provided for all the alternatives.	31/01/08	Not addressed in EIA, but FSR stated it would be done.
4. Assess the greener alternative of dry toilet systems and grey water pumped to gardens and elsewhere so that no sewerage is added to HWTP.	17/01/08, 31/01/08	Not addressed under alternative technologies (sewage).
5. Reference to 12 & 13, correspondence 17/01/08 for what a biodiversity offset agreement entails. In the DSR, the points under Phase1 and Phase 2- 8 (a) – (e) are not biodiversity offset measures.... Only point (f) can be considered a possible biodiversity offset.	31/01/08	Not corrected in EMP; was stated in FSR that it would be corrected in EIA. Discussed in section above.
6. The Eco Centre would serve tourism and educational purposes, not offset residual biodiversity impacts. The DSR	31/01/08	Not addressed in EIA/EMP. See comments above.

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states that ownership of the Eco Centre will be transferred to the Flamingo Environmental Trust and it will manage the Eco Centre. Has the FET agreed to this and does the Trust have the capacity to do so to ensure it is a sustainable venture?		6
7. The DSR sections describing the flora of the biophysical environment and the impact assessment are not adequate, and for the EIA report they need to be more detailed and done by a plant specialist (a botanist, <u>not</u> a mammalogist or zoologist or EAP without enough expertise). It is essential that a proper vegetation assessment is done in the EIA. Sensitive habitats with protected species, threatened or endemic species must be identified and geo-referenced if present, and mitigating measures provided for these species. The botanist should also assist with identifying and mapping the Kamfers Dam ecosystem extent, green areas that need to be left untouched, buffer zones and necessary natural biodiversity corridor from Kamfers Dam (portion 70/49) through the Northgate site (Camel Thorne Estate area, phase 7) and further to the northwest/north. The impacts of habitat fragmentation, impacts on species of special concern, the transformation of the natural vegetation of the drainage line and other possible impacts identified by a botanist must also be assessed.	31/01/08	<ul style="list-style-type: none"> <li>- Not adequately addressed.</li> <li>- A botanist did not do the study, it was done by a mammalogist/ EAP despite our request for a botanist.</li> <li>- Red data and endemic species weren't observed and only 2 protected spp. were recorded.</li> <li>- Vegetation corridors and a natural biodiversity corridor to the north weren't mapped; Kamfers Dam ecosystem extent not mapped.</li> <li>- Drainage line mapped too narrowly in vegetation map.</li> <li>- Impacts of habitat fragmentation not really assessed.</li> </ul>
8. The vertebrate fauna specialist study needs to be extended in the EIA. Two other species of frogs can be added to the list of species; the bubbling cassina and bullfrog have been recorded in the drainage line dams on Flamingo Farm (T. Anderson <i>pers. obs.</i> ), the same drainage line with dams bisecting the Northgate site. The bullfrog is a Red Data listed species and requires special protection. The report should also include an assessment of the impact on the amphibians and other wildlife of transforming the drainage line into an artificial storm water management area, and therefore changing its natural ecology and drainage into Kamfers Dam.	31/01/08	<ul style="list-style-type: none"> <li>- Not addressed in EIA as FSR stated it would be.</li> <li>- Not integrated into impacts assessed.</li> <li>- No indication that the specialist considered these points.</li> </ul>
9. Under the biophysical setting description (1.10.2 DSR), the sensitivity of the Kamfers Dam ecosystem and fact that portions of the Northgate site are part of its catchment area should be	31/01/08	<ul style="list-style-type: none"> <li>- Partly addressed in EIA.</li> <li>- Kamfers Dam ecosystem not mapped.</li> </ul>

discussed. The extent of the Kamfers Dam ecosystem should also be mapped in the figure.		7
10. In the EIA report there should be details under the water sections on the exact engineering design of how water runoff and storm water will be diverted away from Kamfers Dam and prevented from flowing along the drainage line into Kamfers Dam. Will it be diverted/pumped to a less sensitive environment elsewhere? How will the water management dams be constructed, how will overflow be prevented during high rainfall events, will the dams be impervious so that no seepage of polluted water gets into the groundwater, into the drainage line and eventually into Kamfers Dam? These details must also be listed in the EMP.	31/01/08	- Not addressed in EIA/EMP, FSR stated that it would be included in EIA. - EMP only mentions that this is necessary, no details on design or how it will be achieved.
11. In section 4.10.4 where the HWTP is discussed, it must be stipulated exactly how much the Northgate development will contribute to the upgrade of the HWTP and if there is enough funding from the municipality and other sources to cover the total cost.	31/01/08	- Not addressed in EIA. - Discussed under issues above.
12. If the HWTP upgrade is the preferred option, the EIA should include assurance that the phases of the development will wait for adequate WTP upgrade before those phases proceed to prevent any accidental or additional overflow into Kamfers Dam.	17/01/08	- Not fully addressed. - EIA states phases 2 – 8 will wait for upgrade. But how much effluent will phase 1 (Triangle Mall & Estate) add to the HWTP's existing sewage overflow problem and what will this impact be?
13. There needs to be a statement that should ownership of the development be transferred before it is completed, the new owners must comply with the EIA and RoD and continue the development as approved by DTEC and the municipality. This should also be stipulated in the RoD. If the new owners wish to change plans, a new EIA process must be followed.	31/01/08	Partly addressed. FSR states this is covered by NEMA and EIA regulations. Please explain specifically how it is covered by these regulations? These regulations did not prevent other local developments from changing substantially after change of developer. It needs to be written in the RoD and

		property title deed.	8
14. Sect. 5.2 and 7.2 of the DSR mention an informal settlement (shanty town) on a portion of the Northgate site. What will happen to these people, will they be able to afford rental of above R1100 per month and move into the flats? If not, what are the mitigating measures for this social impact? The impact on these people as well as the negative social impacts must also be assessed in the impact table along with the positive effects.	31/01/08	- FSR response states this settlement is not on the Northgate site, but the DSR says it is, so which is true? - Not addressed in EIA/EMP. - This community not specifically discussed in SIA report.	
15. Comments submitted by Dr A. Berruti, Diamond Birding Route, on 27 November 2007 are not appended with the other I & AP comments (in SR). All the issues he raised must also be addressed.	31/01/08	Not addressed in EIA nor appended as an I & AP contribution. The FSR states these comments and all comments will be addressed in the EIA phase.	
16. The EIA must include the Dept of Agriculture's written approval to rezone the land from agricultural use to residential and business.	17/01/08	Not addressed in EIA nor appended.	
17. Sect. 1.7.2 (DSR) schedule for development states that once the RoD is issued, the alienation process with regards to change of ownership will begin. In sect. 1.1 it states that the properties were already purchased in 2006. Did the properties not change ownership then, or what change of ownership does this refer to?	31/01/08	Partly addressed. FSR states sect 1.7.2 refers to transfer of ownership of units, and sect 1.1 refers to the properties purchased for Northgate development. However, the landowners state they have not sold their properties yet. Which is true?	
18. The EIA should include details and layout plans (to scale) for each phase of the development, with time frames that will be adhered to.	17/01/08	- Not addressed in the EIA. - The FSR stated that the final layout plan, as determined by specialist needs, will be included in the EIA.	

Issues addressed:		9
<p>1. The no development option alternative should not preclude that no development will take place at all, but also consider that one of the other alternatives may be developed instead. Under the Biophysical and Environmental factors, no improvement to the existing infrastructure is a positive. If the area retains its <i>status quo</i> and its current buffer zone and catchment services are maintained, the Kamfers Dam ecosystem remains healthy. These positive benefits can be enhanced in future if the undeveloped site is included in a protected area to conserve the Kamfers Dam ecosystem.</p>	31/01/08	Was addressed under the no go option in the EIA.
<p>2. The avifauna specialist study needs to be updated now that the flamingos have bred on the island and in terms of the alternatives that were assessed. The alternatives M. de Villiers was briefed to assess have changed and two of those were not valid alternatives, those being alternative 1 development with mitigation and alt. 2 development without mitigation.</p>	31/01/08	<p>- Mostly addressed in additional specialist report for EIA.</p> <p>- Invalid alternative options not corrected.</p>
<p>3. A hydrological specialist needs to look into the surface water runoff, groundwater flow in the drainage line and towards Kamfers Dam and the consequences of water level rises in Kamfers Dam. The specialist should also map the surface water runoff and catchment area. Under the surface water impact evaluation (6.3.4 DSR) the impacts of storm water runoff into Kamfers Dam without and with mitigation (diversion, etc.) must also be assessed.</p>	31/01/08	<p>Mostly addressed in ground water study for EIA.</p> <p>- Surface water flow (runoff) and Kamfers Dam catchment area not mapped as requested.</p>
<p>4. Under section 6.3.6 (DSR) impact on fauna, the extent of the impact should be ranked as '<u>international</u>' not '<u>local/regional</u>' for both '<u>with</u>' and '<u>without mitigation</u>', as the development is expected to impact on Lesser Flamingo breeding events and this can affect the threatened global population.</p>	31/01/08	Addressed in EIA.
<p>5. Contractor management (sect. 4.2.1) – the PIPP should also include a copy of the EMP and RoD and the contractor must understand their contents and be properly managed to ensure the contractor complies with all their requirements, so that there are no accidents.</p>	31/01/08	Addressed in FSR and EMP.

After reading the FSR and EIA it is clear that this project would contribute significantly to the much needed sustainable economic and social development in Kimberley. However, on considering the facts that 1) this proposed development is being applied for in areas not zoned for residential or business but for conservation, tourism and hospitality in the SDF, 2) has major mitigating measures that will need to be implemented, 3) the significant required upgrades to the Kimberley bulk services (sewage and electricity capacity), 4) the extra costs and levies involved, 5) the biodiversity offset required, and 6) the potential long-term impacts on the highly significant Kamfers Dam ecosystem adjacent to the site, it is our opinion that the Northgate development should proceed at an alternative site and the development should not be approved for this proposed site.

We are of the opinion that the most appropriate land-use of these properties would be as a conservation buffer zone as part of a protected area around Kamfers Dam to protect this sensitive asset of international importance and high biodiversity and conservation value.

Yours sincerely



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