



GEORGE
TEL: +27 (0) 44 873 4923 **FAX:** +27 (0) 44 874 5953
EMAIL: info@sesc.net **WEBSITE:** www.sesc.net
ADDRESS: Unit 17 Cathedral Square,
 Cathedral Street, George, 6530
PO BOX: 9087, George, 6530

CAPE TOWN
TEL: +27 (0) 21 554 5195 **FAX:** +27 (0) 86 575 2869
EMAIL: betsy@sesc.net **WEBSITE:** www.sesc.net
ADDRESS: Tableview, Cape Town, 7441
PO BOX: 443, Milnerton, 7435

REVISED TERMS OF REFERENCE FOR TERRESTRIAL BIODIVERSITY SPECIALIST ASSESSMENT / COMPLIANCE STATEMENT

PROPOSED REMOVAL AND REPLACEMENT OF VARIOUS EXISTING CULVERTS AND PIPES IN THE GARDEN ROUTE, WESTERN CAPE

1. INTRODUCTION

Sharples Environmental Services cc (SES) has been appointed as the independent Environmental Assessment Practitioner (EAP) to conduct the Environmental Impact Assessment process for the Proposed removal and replacement of various existing culverts and pipes along five roads in the Garden Route, Western Cape.

Please refer to the attached document for a breakdown of each site.

1.1 Localities and structures of each site

Site #	Road - MR355 – Madiba Drive / Seven Passes Road – George Swart River Tributaries	
1.	MR355 km 3.00	Remove and replace pipe culvert
10.	MR355 km 1.2	2130 mm diameter Armco repair with new wing walls
11.	MR355 km 2.4	480 mm diameter pipe - replace existing & fill existing pipe
12.	MR355 km 2.7	1160 mm diameter Armco sleeve repair with new wing walls

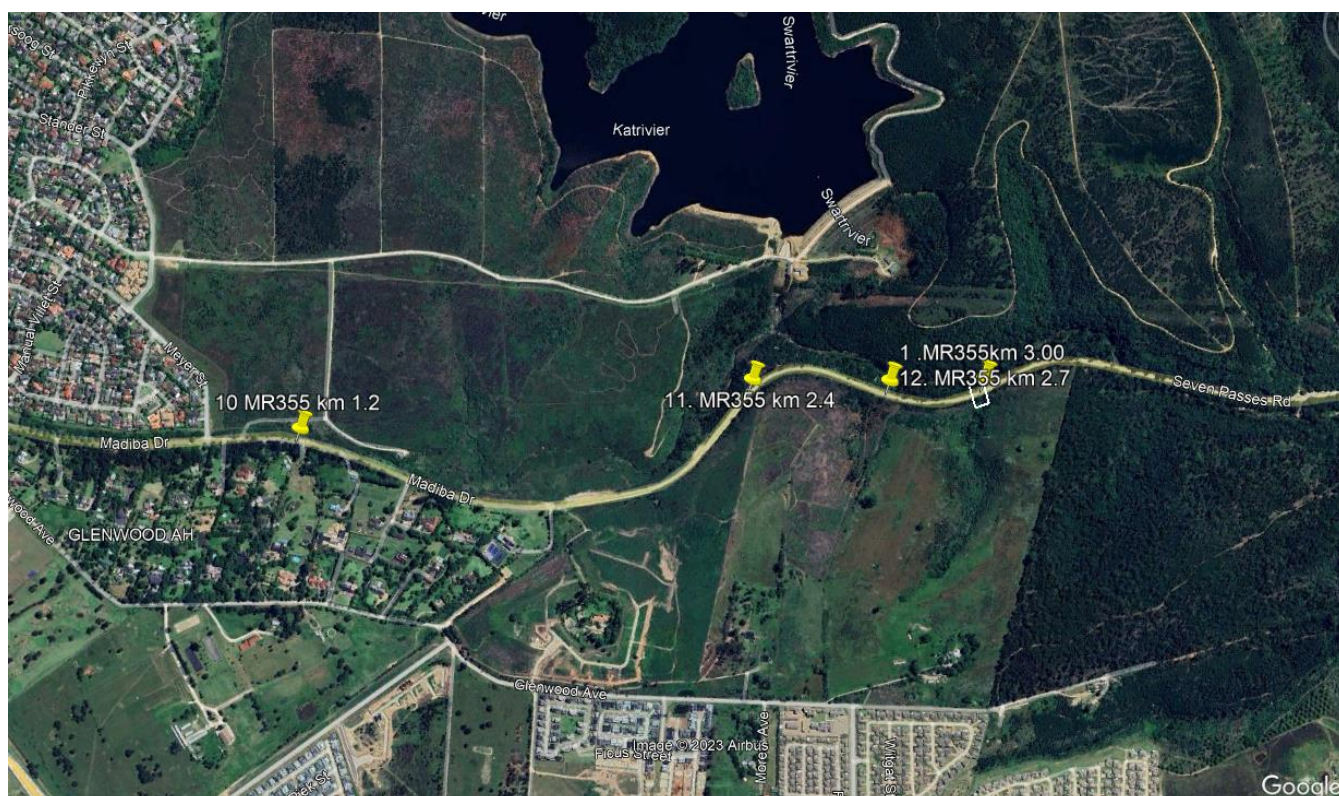


Figure 1: Locality Map of the sites (1, 10, 11 and 12) on MR355.

Site #	Road	Action
4.	DR1633 km 3.35 – Jonkersberg Road – Mossel Bay Municipality Varings River Crossing	Remove and Replace Causeway – bypass road partially outside road reserve.
6.	DR1639 km 1.63 – Keurbos Road – George Municipality Keurbos River Crossing	Remove and Replace Causeway – bypass road partially outside road reserve
8.	DR1602 km 3.35 – Kleinplaas Road – Mossel Bay Municipality Varings River Crossing	Remove Causeway, realign road and provide new causeway outside the current road reserve

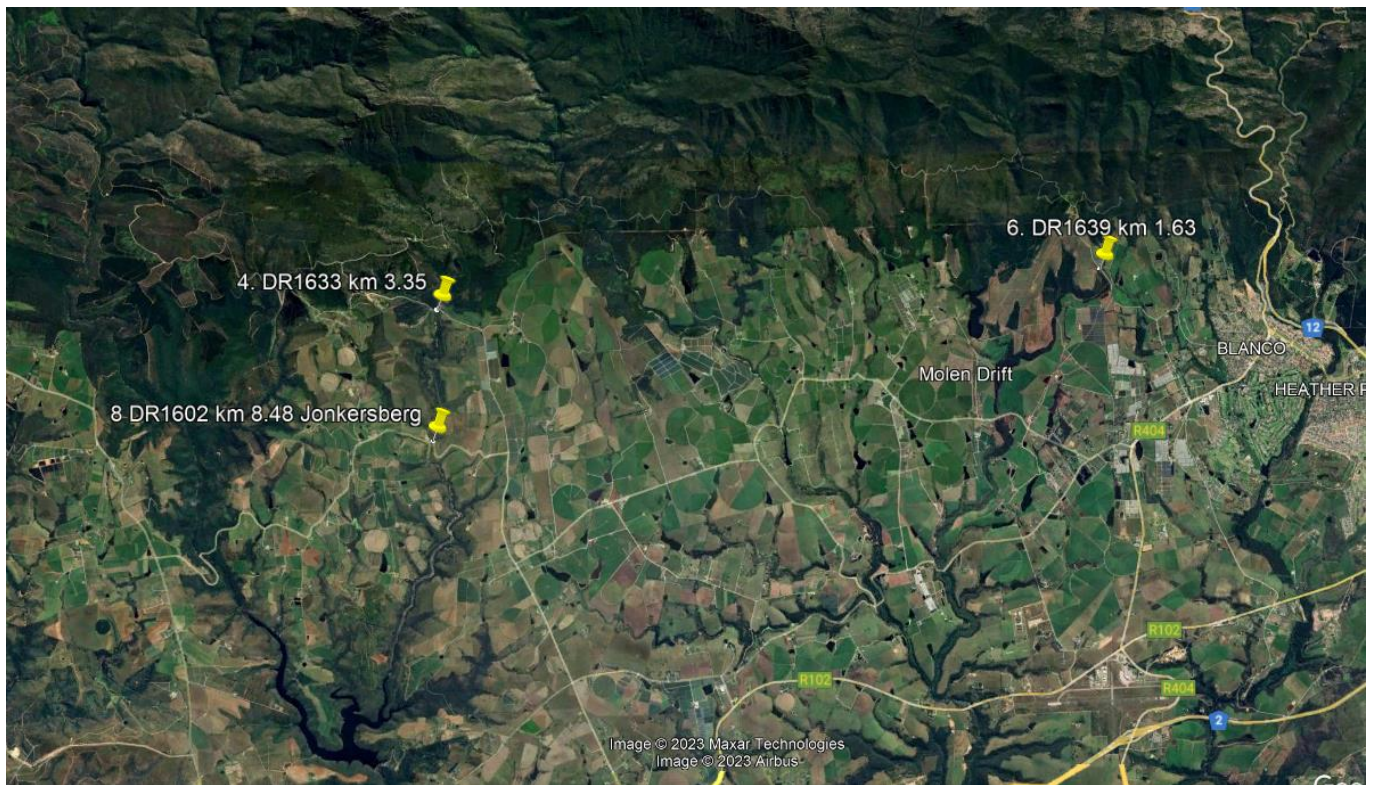


Figure 2: Localities of Sites 4, 6 and 8.

Site #	Road	Action
5.	DR1791 km 1.59 – Stofpad Road Bitou Municipality Leermansdrif River Crossing	Remove and Replace Causeway – bypass road partially outside road reserve.

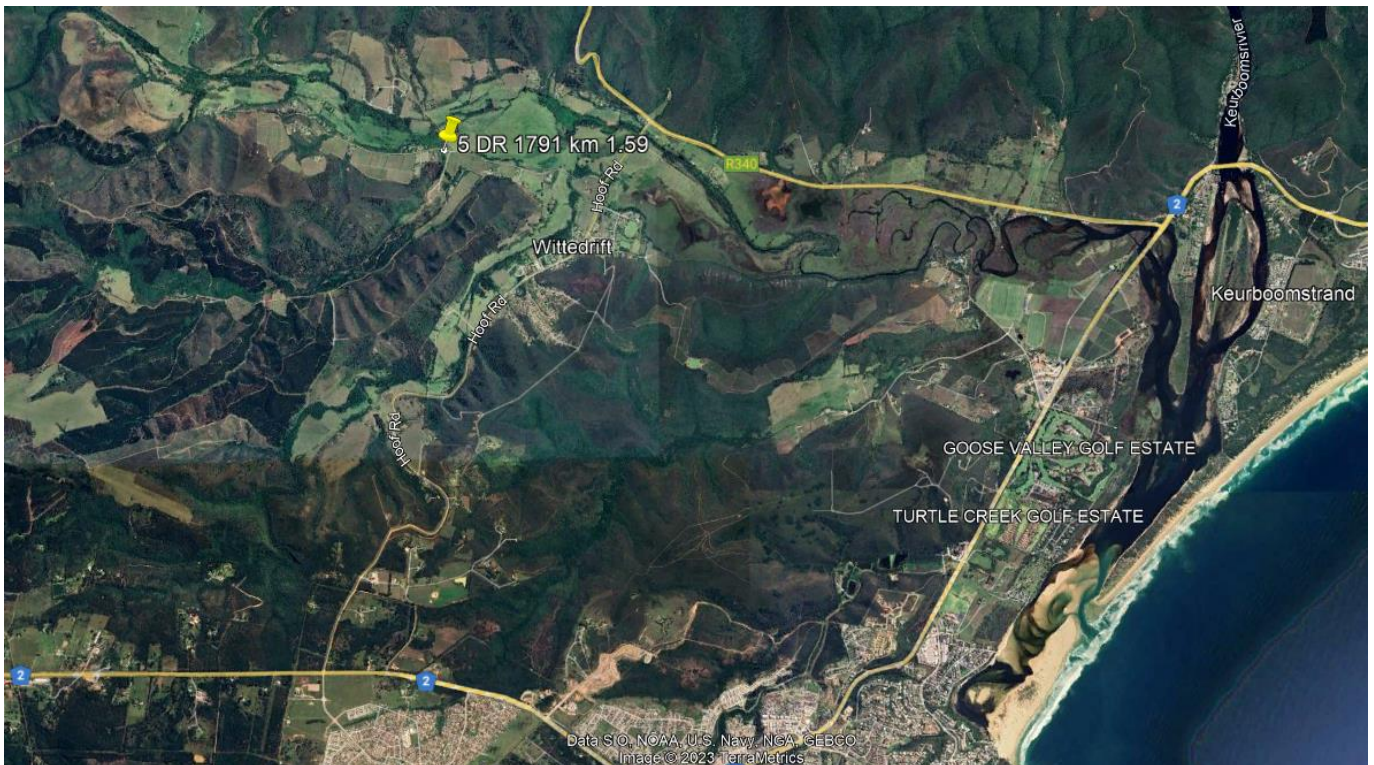


Figure 3: Locality of site 5 on DR1791.

Screening reports for all sites were completed on between 11 August 2022 and 14 September 2023 and a **“Very High”** environmental sensitivity rating was indicated for the Terrestrial Biodiversity theme for all the sites. Therefore, specialist input is required in this regard.

As per the procedures for the assessment and minimum criteria for reporting on identified environmental themes (Terrestrial Biodiversity) in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation (March 2020), *“An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified on the screening tool as being of “very high sensitivity” for terrestrial biodiversity, must submit a Terrestrial Biodiversity Specialist Assessment”*. Therefore, specialist input is required in this regard.

2. SPECIALIST INVOLVEMENT

The purpose of this Assessment is to determine the proposed development impact on the Terrestrial Biodiversity.

The specialist conducting this study must:

- Be independent and have expertise in conducting similar assessments;
- Have a suitable academic qualification in the relative field;
- Be registered with the South African Council for Natural Scientific Professionals (SACNASP and having expertise in the field of Terrestrial Biodiversity;
- Be familiar with the assessment criteria commonly used in the EIA Process to assess and evaluate impacts, as well as the newly promulgated Protocols related to the Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes (March 2020 & October 2020);
- Have good knowledge relating to assessment techniques and to relevant legislation, policies and guidelines.
- Perform the work in an objective manner, even if this results in views and findings that are not favourable to the applicant.

2.1 Terms of Reference

The assessment of the proposal will necessitate specialist input which will need to be undertaken with the Terms of Reference listed below and relevant specialist guidelines. In addition to meeting the requirements

of the relevant legislation, the Terrestrial Biodiversity Specialist Assessment should also meet those of the Guideline for Involving Terrestrial Biodiversity specialists in EIA Processes and the relevant Gazetted Protocols: [https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial Biodiversity_Assessment_Protocols.pdf](https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf).

The specialist must have no financial or other vested interest in the proposed development and must be professionally registered with the SACNASP.

Terrestrial Biodiversity Assessment scope.

Phase 1

The assessment must provide a baseline description of the site which includes, as a minimum, the following aspects:

- ✓ A description of the ecological drivers or processes of the system and how the proposed development will impact these;
- ✓ A description of the ecological infrastructure, functioning, processes and services (e.g., fire, migration, pollination, etc.) that operate within the preferred site;
- ✓ A description of the ecological corridors that the proposed development would impede including migration and movement of flora and fauna;
- ✓ Indicate whether or not the proposed development will have any impact on biodiversity features;
- ✓ An indication and description of any significant terrestrial landscape features, including rare or important flora- faunal associations, presence of strategic water source areas (SWSAs) or freshwater ecosystem priority area (FEPA) sub catchments;
- ✓ A description of terrestrial biodiversity and ecosystems on the preferred site, including:
 - main vegetation types;
 - threatened ecosystems, including listed ecosystems as well as locally important habitat types identified;
 - ecological connectivity, habitat fragmentation, ecological processes and fine - scale habitats; and
 - species, distribution, important habitats (e.g. feeding grounds, nesting sites, etc.) and movement patterns identified;
 - Species of Conservation Concern
- ✓ Make reference to the allocated sensitivity as per the screening tool, state whether or not this sensitivity is accurate and recommend appropriate reclassification if it is not.
- ✓ The assessment must identify any alternative development footprints within the preferred site which would be of a "low" sensitivity as identified by the screening tool and verified through the site sensitivity verification.

Phase 2

Based on the results of a site visit, the following aspects are to be identified, discussed and applied to form the base for assessment:

- ✓ Terrestrial Critical Biodiversity Areas (CBAs), including:
 - the reasons why an area has been identified as a CBA;
 - an indication of whether or not the proposed development is consistent with maintaining the CBA in a natural or near natural state or in achieving the goal of rehabilitation;
 - percentage of site (erven/farm portions) covered by CBA
 - percentage of CBA (specify degraded/transformed and pristine) lost to proposed development layout alternatives (if layout is available).
 - the impact on species composition and structure of vegetation with an indication of the extent of clearing activities in proportion to the remaining extent of the ecosystem type(s);
 - the impact on ecosystem threat status;
 - the impact on explicit subtypes in the vegetation;
 - the impact on overall species and ecosystem diversity of the site; and
 - the impact on any changes to threat status of populations of species of conservation concern in the CBA;

- Inclusion of any necessary buffer areas, including the identification of zones of sensitivity within the CBA that are priority to maintain ecological integrity.
- ✓ Terrestrial Ecological Support Areas (ESAs), including:
 - Percentage/quantity of site (erven/farm portions) covered by ESA
 - percentage of ESA lost to development (if layout is available)
 - the impact on the ecological processes that operate within or across the site;
 - the extent the proposed development will impact on the functionality of the ESA; and
 - loss of ecological connectivity (on site, and in relation to the broader landscape) due to the degradation and severing of ecological corridors or introducing barriers that impede migration and movement of flora and fauna;
 - Inclusion of any necessary buffer areas, including the identification of zones of sensitivity within the ESA that are priority to maintain ecological integrity.
- ✓ Protected areas as defined by the National Environmental Management: Protected Areas Act, 2004 including-
 - an opinion on whether the proposed development aligns with the objectives or purpose of the protected area and the zoning as per the protected area management plan;
- ✓ Priority areas for protected area expansion, including-
 - the way in which in which the proposed development will compromise or contribute to the expansion of the protected area network;
- ✓ SWSAs including:
 - the impact(s) on the terrestrial habitat of a SWSA; and
 - the impacts of the proposed development on the SWSA water quality and quantity (e.g. describing potential increased runoff)
- ✓ FEPA sub catchments, including-
 - the impacts of the proposed development on habitat condition and species in the FEPA sub catchment;
- ✓ Indigenous forests, including:
 - impact on the ecological integrity of the forest; and
 - percentage of natural or near natural indigenous forest area lost and a statement on the implications in relation to the remaining areas.
- ✓ Vegetation present onsite, including:
 - percentage of vegetation cover on the proposed site (erven/farm portions)
 - percentage of indigenous vegetation cover
 - percentage of alien invasive vegetation cover
 - percentage of vegetation cover to be lost due to development (provision of layouts depending)
 - percentage indigenous vegetation lost
 - percentage of alien invasive vegetation to be cleared
 - visualisation (map/illustration) of alien and indigenous vegetation loci.
- ✓ Identification of core ecosystem areas within the proposed site, as well as a description of the Ecosystem services and process provided.
- ✓ An indication and description of any Species of Conservation Concern
 - If search and rescue is recommended please provide a description of appropriate removal, maintenance and reinstatement methodology.
- ✓ Specify location of the areas not suitable for development, which are to be avoided during construction and operation (where relevant)
- ✓ Determine the need for a Compliance Statement or a Terrestrial Biodiversity Assessment Report, as per point 1: General Information of the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity, it is stated:
 - 1.3. However, where the information gathered from the site sensitivity verification differs from the designation of “very high” terrestrial biodiversity sensitivity on the screening tool and it is found to be of a “low” sensitivity, then a Terrestrial Biodiversity Compliance Statement must be submitted.

- 1.5. If any part of the proposed development footprint falls within an area of “very high” sensitivity, the assessment and reporting requirements prescribed for the “very high” sensitivity apply to the entire footprint, excluding linear activities for which impacts on terrestrial biodiversity are temporary and the land in the opinion of the terrestrial biodiversity specialist, based on the mitigation and remedial measures, can be returned to the current state within two years of the completion of the construction phase, in which case a compliance statement applies. Development footprint in the context of this protocol means the area on which the proposed development will take place and includes any area that will be disturbed.

Phase 3 – If a Compliance Statement is Required

- ✓ The compliance statement must be prepared by a specialist registered with the SACNASP and having expertise in the field of ecological sciences.
- ✓ The compliance statement must:
 - be applicable to the preferred site and proposed development footprint;
 - confirm that the site is of “low” sensitivity for terrestrial biodiversity; and
 - indicate whether or not the proposed development will have any impact on the biodiversity feature.
- ✓ The compliance statement must contain, as a minimum, the following information:
 - the contact details of the specialist, their SACNASP registration number, their field of expertise and a curriculum vitae;
 - a signed statement of independence by the specialist;
 - a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;
 - a baseline profile description of biodiversity and ecosystems of the site;
 - the methodology used to verify the sensitivities of the terrestrial biodiversity features on the site, including equipment and modelling used, where relevant;
 - in the case of a linear activity, confirmation from the terrestrial biodiversity specialist that, in their opinion, based on the mitigation and remedial measures proposed, the land can be returned to the current state within two years of completion of the construction phase;
 - where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMPr;
 - a description of the assumptions made and any uncertainties or gaps in knowledge or data; and
 - any conditions to which this statement is subjected.
- ✓ A signed copy of the compliance statement must be appended to the Basic Assessment Report or Environmental Impact Assessment Report.

Phase 3 – If a Terrestrial Biodiversity Assessment Report is required

The Terrestrial Biodiversity Specialist Assessment Report must discuss the following aspects:

- ✓ A description of the areas not suitable for development, which are to be avoided during construction and operation (where relevant);
- ✓ additional environmental impacts expected from the proposed development;
- ✓ any direct, indirect and cumulative impacts of the proposed development;
- ✓ the degree to which impacts and risks can be mitigated;
- ✓ the degree to which the impacts and risks can be reversed;
- ✓ the degree to which the impacts and risks can cause loss of irreplaceable resources;
- ✓ proposed impact management actions and impact management outcomes proposed by the specialist for inclusion in the Environmental Management Programme (EMPr);
- ✓ how the mitigation hierarchy was applied when determining mitigation measures and recommendations.
- ✓ a motivation must be provided if there were development footprints identified as the site verification visit, that were identified as having a “low” terrestrial biodiversity sensitivity and that were not considered appropriate;
- ✓ a substantiated statement, based on the findings of the specialist assessment, regarding the acceptability, or not, of the proposed development, if it should receive approval or not; and
- ✓ any conditions to which this statement is subjected.

- ✓ Identification of any buffer areas.

General

- ✓ Reference all sources of information and/or data used.
- ✓ Include contact details, relevant experience, CV and SACNASP registration number.
- ✓ A signed statement of independence by the specialist;
- ✓ A statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;
- ✓ A description of the methodology used to undertake the site survey, prepare the assessment, verify the sensitivities of the terrestrial biodiversity features on the site, including equipment and modelling used, where relevant.
- ✓ The assessment must be undertaken on the preferred site and within the proposed development footprint.
- ✓ Where required, proposed impact management actions and outcomes or any monitoring requirements for inclusion in the EMPr;
- ✓ A description of the limitations, assumptions made and any uncertainties or gaps in knowledge or data as well as a statement of the timing and intensity of site inspection observations;
- ✓ Any conditions to which the assessment is subjected.
- ✓ The specialist and the assessment must comply with the following guidelines and legislation:
 - Procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of Sections 24(5)(A) and (H) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation
- ✓ The assessment should be prepared in a suitable font and submitted to SES in draft form.
- ✓ Ensure it is clear that the mitigation hierarchy has been applied, in order, when recommendations and mitigation is applied.
- ✓ Ensure that there are no conflicting recommendations or conclusions.
- ✓ Ensure the EAP is provided with working files, ie: KML/KMZ/Shapefiles and if a buffer is recommended, please ensure relevant table of coordinates are provided.

2.2 Quotation Details

Please provide a written quote for all Phases, including a break-down of costs and indicate your availability to commence the study.

3. EXPECTED DELIVERABLES

An initial draft assessment covering the above requirements must be submitted to SES **four weeks** after the notice to proceed with above scope of work. The assessment must be prepared in a suitable font (such as Arial 12) and the format and content must comply with Appendix 6 of the amended EIA Regulations, 2017, as well as the Promulgated Protocols relating to Terrestrial Biodiversity (dated March 2020). The final assessment (which shall include any reasonable amendments in response to the EAP's comments on the initial draft, if necessary) shall be delivered **two weeks** after the draft assessment, assuming the EAP shall have provided comments within a week after receiving the initial draft assessment.