

**THE CONSTRUCTION OF A 66KV OVERHEAD POWERLINE
FROM THE TRANSHEX SUBSTATION TO THE
WORCESTER INDUSTRIAL SUBSTATION ON THE
REMAINING EXTENT OF ERF NO. 1, ERVEN 13518, 3519,
13433 AND 5, WORCESTER.**

**EXTERNAL ENVIRONMENTAL AUDIT REPORT IN TERMS
OF REGULATION 34 OF THE NEMA EIA REGULATIONS,
2014 (AS AMENDED).**

DEA&DP EIA REF. NO. 16/3/3/1/B2/32/1021/23
NEAS REF. NO. WCP/EIA/0001251/2023



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KAPPEC

18 February 2025

DETAILS OF THIS REPORT

Status of this Report	Final Regulation 34 External Compliance Audit Report.
Date Submitted	18 February 2025
Public Review Period	Not Applicable
Report Title	The Construction of a 66kv Overhead Powerline from The Transhex Substation to the Worcester Industrial Substation on the Remaining Extent of Erf No. 1, Erven 13518, 3519, 13433 and 5, Worcester.
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 The logo for KAPP Environmental Consultants features a stylized green leaf icon to the left of the word 'KAPP' in large, bold, dark grey capital letters. Below 'KAPP' is the text 'ENVIRONMENTAL CONSULTANTS' in smaller, dark grey capital letters.	

DISCLAIMER

This report has been prepared for the Breede Valley Municipality represented by Mr. Pieter Hartzenburg and is subject to and issued in accordance with the agreement with Kapp Environmental Consultant (Pty) Ltd. (KAPPEC).

The opinions expressed in this report have been based on the information supplied to KAPPEC by the Client and the relevant Environmental Assessment Practitioner. The Author has exercised all due care in reviewing the supplied information, but conclusions from the review are reliant on the accuracy and completeness of the supplied data. KAPPEC does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. KAPPEC accepts no liability or responsibility whatsoever for it in respect of any use of or reliance upon this report by any third party.

Opinions presented in this report apply to the site conditions and features as they existed at the time of the writing of this report, and those reasonably foreseeable.

Copying of this report without the permission of the Client and KAPPEC is not permitted.

LETTER OF UNDERTAKING AND STATEMENT OF INDEPENDENCE

I Renier Kapp, as the appointed independent Environmental Assessment Practitioner (EAP) hereby declare that I:

- Will perform the work relating to the appointment in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- Other than fair remuneration for work performed/to be 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;
- Work performed for this study was done in an objective manner irrespective of how such findings may be favourable or not to the applicant;
- declare that there are no circumstances that may compromise my objectivity in performing such work;
- All facts and findings will be presented in an objective manner in accordance with my professional experience and information derived from the study;
- have expertise in conducting the independent audit, including knowledge of the relevant legislation and any guidelines that have relevance to the development; and
- All particulars furnished in this report are true and correct.



(Renier Kapp)

Signature of the Principle Environmental Assessment Practitioner

Kapp Environmental Consultants (Pty) Ltd (KAPPEC)

Name of Company

18 February 2025

Date

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ABBREVIATIONS

MMP	Maintenance Management Plan
DEFF	Department of Environment, Forestry and Fisheries
DWS	Department of Water Affairs and Sanitation
EA	Environmental Authorization
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Programme
DEO	Designated Environmental Officer
KAPPEC	Kapp Environmental Consultants
I&AP	Interested and Affected Parties
RE	Resident Engineer

APPENDICES

Appendix A:	Site Photographs
Appendix B:	Site Development Plan
Appendix C:	Copy of EA
Appendix D:	Copy of EMPr
Appendix E:	Commencement Notification and I&AP Database
Appendix F:	ECO reports
Appendix G:	Method Statements

INTRODUCTION

Kapp Environmental Consultants (Pty) Ltd. (KAPPEC) has been appointed on behalf of the Breede Valley Municipality (the Applicant) as the independent environmental practitioners to undertake an external compliance audit in fulfilment of Condition 15 of the Environmental Authorization (the EA) and Regulation 34 of the NEMA EIA Regulations, 2014 (as amended).

An Environmental Authorisation (EA) was granted to the Breede Valley Municipality on August 10, 2023 (DEA&DP EIA Ref: 16/3/3/1/B2/32/1021/23) in terms of the National Environmental Management Act, 1998 (Act 107 Of 1998) and The Environmental Impact Assessment Regulations, 2014 (as amended).

This purpose of this external audit, conducted in alignment with the National Environmental Management Act (NEMA), is to increase the contractor's compliance rating in terms of the approved Environmental Authorization and the EMP. The body of this report will incorporate the auditable conditions and requirements contained in both the EA and the EMP. The conditions of the EA have been summarized in the report including its corresponding level of compliance with each condition.

The methodology followed for conducting the environmental audit included:

- Compilation of background information for site visit
- Site Visit (6 November 2024)
- Documentation audit
- Compilation of environmental audit report
- Submission of environmental audit report (18 February 2024)

The items have been included in table format and compliance will be indicated based on assigned color significance as per Table 1 below:

TABLE 1: COMPLIANCE RATING

Colour	Compliance Rating Significance
GREY	A grey item indicates that a compliance rating is not relevant. Item is listed for awareness although will not/cannot be rated.
GREEN	An item is marked green to indicate complete compliance in line with the EMP.
YELLOW	An item is marked yellow to indicate sufficient compliance although possibly not as prescribed in the EMP.
ORANGE	An item is marked orange to indicate a non-compliance although the resulting impact is not deemed significant.
RED	An item is marked red to indicate a significant or ongoing non-compliance which needs to be addressed as per the EAP instruction.

PROJECT DESCRIPTION

The proposed project involves the construction of a 66kV overhead powerline extending approximately 3 kilometres from the Transhex Substation to the Worcester Industrial Substation. This new powerline will be supported by 23 pylon footing structures, strategically positioned along the alignment to minimize environmental impact. The vertical heights of these pylons will vary from 18 meters to 29 meters, with the tallest structure measuring 28.60 meters. The overall development footprint for the pylon structures will cover an area of about 931.5 square meters.

Project Alignment and Technical Aspects

- Total Length: Approximately 3 kilometers.
- Pylon Structures: 23 in total, with 6 located within the substation boundaries and 17 along the powerline route.
- Pylon Footing Dimensions: Each pylon footing will have a footprint ranging between 9.6m² and 40.5m², with a total development footprint of up to 931.5m².
- Pylon Height: Structures will vary in height from 18m to 29m.

The powerline route will originate at the Worcester Industrial Substation on Erf 13518, running east-southeast for 500 meters before turning southwest and aligning alongside the western bank of the Hex River for approximately 1.5 kilometers. It will traverse the Hex River in a southeasterly direction, crossing the R60 and a railway line, before following the river's eastern bank for 650 meters to connect at the Transhex Substation.

Environmental and Technical Considerations

The pylons will be situated both within and near watercourses, including within 32 meters of the Hex River's delineated extent and below the 1:100-year flood lines. The overhead powerline will also pass through and near aquatic Critical Biodiversity Areas (CBAs), as well as braided channels and Environmental Drainage Lines (EDLs).

Given Worcester's rapid urban growth and the increasing demand for electricity, this infrastructure development is essential to expand the town's electrical service capacity. However, specialist studies have been conducted to assess and mitigate environmental impacts, particularly on botanical and freshwater ecosystems. Mitigation measures have been outlined to ensure that the project adheres to sustainable environmental practices and limits irreversible impacts on the natural surroundings.

The construction of the 66kV overhead powerline is crucial for meeting Worcester's rising electricity needs and ensuring adequate service delivery. The relatively small physical footprint of the pylon structures, combined with careful planning and environmental management, is expected to minimize disturbance to the Hex River and adjacent sensitive areas.

LISTED ACTIVITIES

The Amended EA subsequently authorised the applicant to undertake the underneath **listed activities**:

Listing Notice 1 of the NEMA EIA Regulations, 2014 (as amended):

Activity 11:

Activity Description:

The development of facilities or infrastructure for the transmission and distribution of electricity -

- (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or
- (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more;

excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is -

- (a) temporarily required to allow for maintenance of existing infrastructure;
- (b) 2 kilometres or shorter in length;
- (c) within an existing transmission line servitude; and
- (d) will be removed within 18 months of the commencement of development.

The powerline will have a capacity of 66 kilovolts.

Activity 12:

Activity Description:

The development of—

- (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or
- (ii) infrastructure or structures with a physical footprint of 100 square metres or more;

where such development occurs -

- (a) within a watercourse;
- (b) in front of a development setback; or
- (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; —

Excluding -

- (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;
- (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
- (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;
- (dd) where such development occurs within an urban area;

(ee) where such development occurs within existing roads, road reserves or railway lines; or
(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.

The footprint of the pylon footing exceeds 100m² in extent, within 32m of watercourse.

Activity 19:

Activity Description:

The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than 10 cubic metres from a watercourse;

but excluding where such infilling, depositing, dredging, excavation, removal or moving-

(a) Will occur behind a development setback;

(b) Is for maintenance purposes undertaken in accordance with a maintenance management plan;

(c) Falls within the ambit of activity 21 in this Notice, in which case that activity applies.

(d) Occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or

(e) Where such development is related to the development of a port or harbor, in which case activity 26 in Listing Notice 2 of 2014 applies.

The pylons to be located within a watercourse will result in the excavation and moving of more than 10 cubic metres of sand/soil/rock within a watercourse.

Listing Notice 3 of the NEMA EIA Regulations, 2014 (as amended):

Activity 12:

Activity Description:

The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.

(i) Western Cape:

i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;

More than 300m² of endangered vegetation will be cleared.

REGULATION 34 EXTERNAL AUDIT REQUIREMENTS

This section will attempt to detail the content requirements to be included as part of a Regulation 34 Audit Report as outlined in terms of Appendix 7 of Regulation 982 of the 2014 EIA Regulations.

Environmental audit report

The environmental audit report must provide recommendations regarding the need to amend the EMPr, and where applicable, the closure plan.

Objective of the environmental audit report

The objective of the environmental audit report is to

- a) report on –
 - i. the level of compliance with the conditions of the environmental authorisation and the EMPr, and where applicable, the closure plan; and
 - ii. the extent to which the avoidance, management and mitigation measure provided for in the EMPr, and where applicable, the closure plan achieve the objectives and outcomes of the EMPr, and closure plan;
- b) identify and assess any new impacts and risks as a result of undertaking the activity;
- c) evaluate the effectiveness of the EMPr, and where applicable, the closure plan; and
- d) identify shortcomings in the EMPr, and where applicable the closure plan, and
- e) identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr, and where applicable, the closure plan.

Content of environmental audit reports

(1) An environmental audit report prepared in terms of these Regulations must contain –

- a) details of the –
 - i. independent person who prepared the environmental audit report; and
 - ii. expertise of the independent person that compiled the environmental audit report;
- b) a declaration that the independent auditor is independent in a for as may be specified by the competent authority;
- c) an indication of the scope of, and purpose for which, the environmental audit report was prepared;
- d) a description of the methodology adopted in preparing the environmental audit report;
- e) an indication of the ability of the EMPr, and where applicable, the closure plan to –
 - i. sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an on-going basis;
 - ii. sufficiently provide for the avoidance, management and mitigation of environmental

- impacts associated with the closure of the facility; and
- iii. ensure compliance with the provisions of environmental authorisation, EMPr, and where applicable, the closure plan;
- f) a description of any assumptions made, and any uncertainties or gaps in knowledge;
- g) a description of any consultation process that was undertaken during the course of carrying out the environmental audit report;
- h) a summary and copies of any comments that were received during any consultation process; and
- i) any other information requested by the competent authority.

Additional Content of Environmental Audit Reports

According to the issued EA, the following should be addressed in addition to the minimum requirements as set out above.

15. In accordance with the recommendation provided in the Visual Impact Assessment compiled by David Gibbs and dated 26 June 2023), and as included in the EMPr, tall vegetation must be **planted along the boundary of the site during the construction phase** to form a visual screen.

15.1. The **establishment and maintenance of the visual screen** must be reported on as part of the environmental audit reports to be submitted to the competent authority.

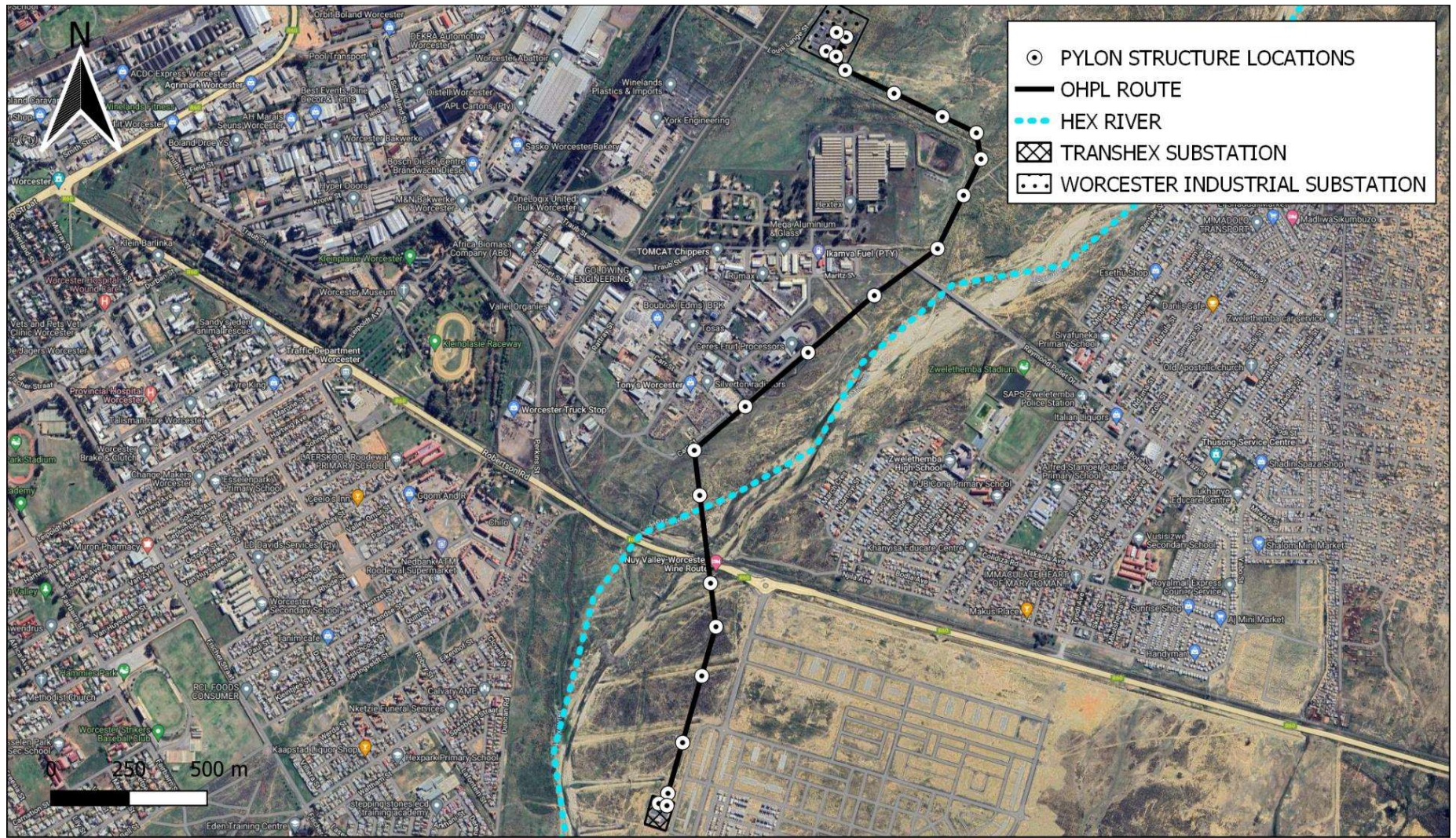


FIGURE 1: SITE LAYOUT PLAN

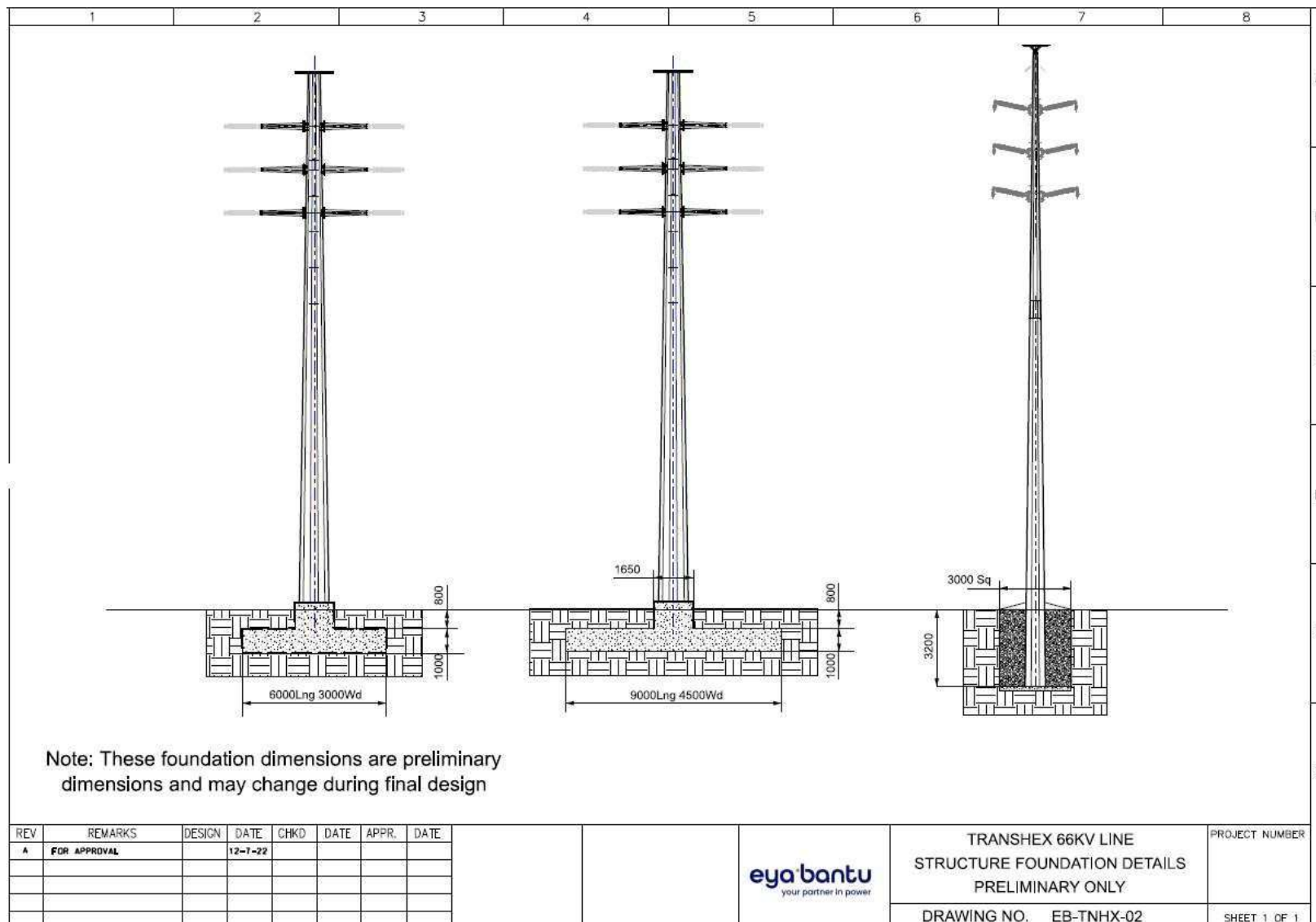


FIGURE 2: PYLON FOOTING STRUCTURE

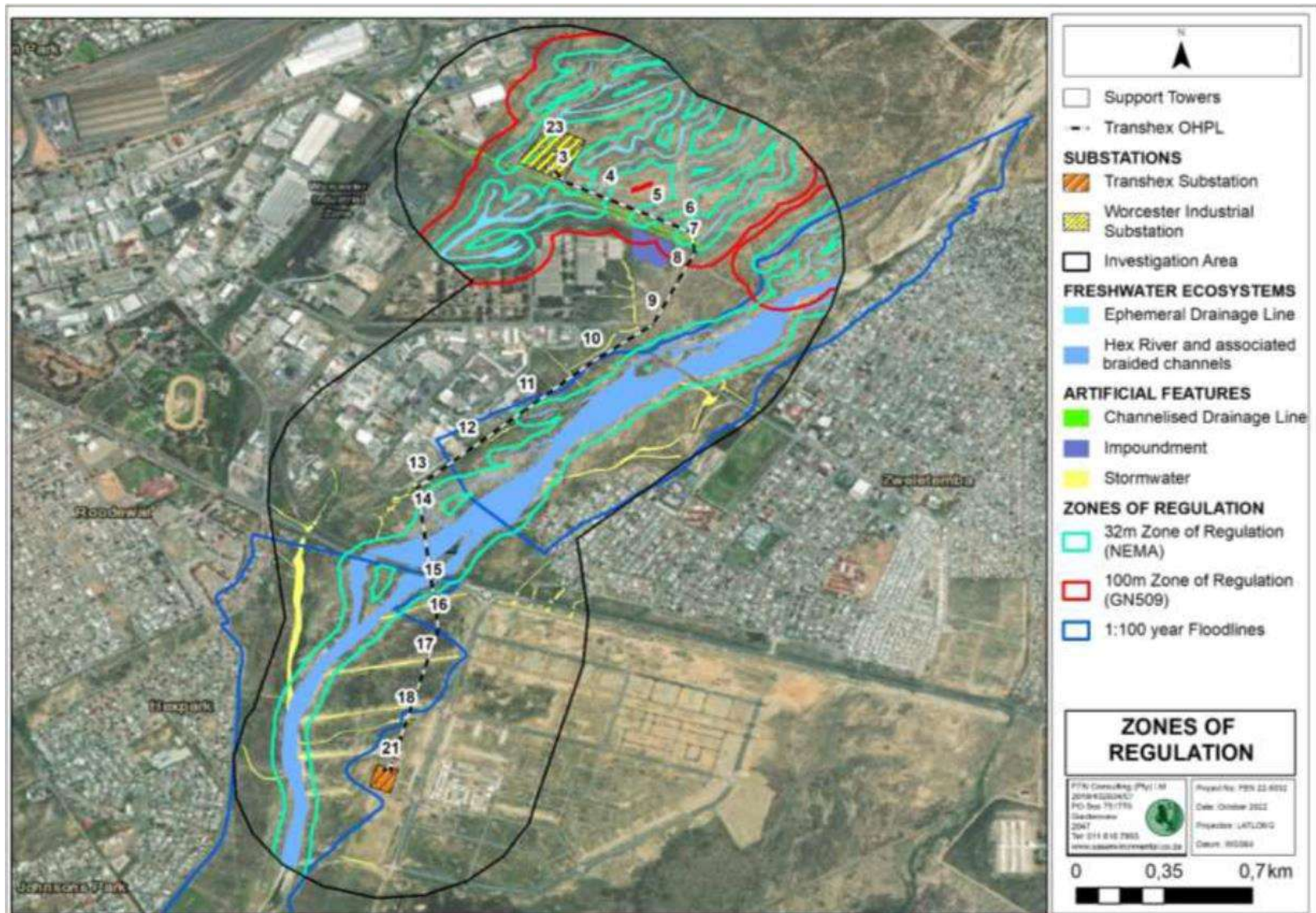


FIGURE 3: ZONES OF REGULATION IN TERMS OF NEMA AND GN509 AS IT RELATES TO THE NWA

CONDITIONS OF AUTHORISATION

TABLE 2: ENVIRONMENTAL AUTHORISATION CONDITIONS AND COMPLIANCE

No.	EA CONDITIONS	COMPLIANCE FINDING
1.	Scope of authorisation The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the Preferred Layout 1 described in the BAR dated 2 June 2023 on the site as described in Section C above.	The preferred alternative, as authorised, is being implemented on-site.
2.	The holder must commence with the listed activities on the site within a period of five years from the date issue of this Environmental Authorisation.	A letter to notify the department of the intended commencement of activities was submitted on 10 June 2024. The holder commenced construction in July 2024, and the EA was granted on the 10 th of August 2023, thus within 5 years. Please refer to Appendix E for proof.
3.	The development must be concluded within ten years from the date of commencement of the listed activities.	Noted. The contractor is progressing well on site all the pylons have been casted up to Transhex during the audit.
4.	The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.	Noted, the holder holds all responsibility for the actions undertaken by anyone on site.
5.	Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to	Noted. No changes or deviations from the scope of the project description have occurred since the EA was obtained/approved.

	apply for further authorisation in terms of the applicable legislation.	
6.	Written notice to the Competent Authority Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction activities. 6.1 The notice must make clear reference to the site details and EIA Reference number given above. 6.2 The notice must also include proof of compliance with the following conditions described herein: Conditions: 7, 8, 12 and 18.	A notification of commencement was sent to DEA&DP on the 10th of June 2024 and made clear reference to the site details and EIA Reference, it also included proof/comments of compliance with conditions 7, 8, 12 and 18. Condition 7: The I&AP Notification letter after the approval of the EA was sent on the 14th of August 2023 (4 days after the EA was granted). All the required information was provided as stipulated in this condition. Condition 8: The activities will commence outside the 20-day appeal period. The EA was granted on the 10th of August 2023, and commencement is proposed 11 months later. Condition 12: Guillaume Nel Environmental Consultants (GNEC) has been appointed as the Environmental Control Officer (ECO) to conduct monthly audits on environmental compliance and will subsequently submit monthly reports. Condition 18: Proof of the demarcation of the construction activities that has been demarcated will be submitted within the first ECO report submitted to the Department. Please refer to proof included as Appendix E to this report.
7.	Notification and administration of appeal The holder must in writing, within 14 (fourteen) calendar days of the date of this decision – 7.1 notify all registered Interested and Affected Parties ("I&APs") of – 7.1.1 the outcome of the application;	The I&AP Notification letter after the approval of the EA was sent on the 14th of August 2023 (4 days after the EA was granted). All of the required information was provided as stipulated in this condition. Please refer to proof included as Appendix E to this

	7.1.2 the reasons for the decision as included in Annexure 3; 7.1.3 the date of the decision; and 7.1.4 the date when the decision was issued. 7.2 draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, 2014 detailed in Section F below; 7.3 draw the attention of all registered I&APs to the manner in which they may access the decision; 7.4 provide the registered I&APs with: 7.4.1 the name of the holder (entity) of this Environmental Authorisation, 7.4.2 name of the responsible person for this Environmental Authorisation, 7.4.3 postal address of the holder, 7.4.4 telephonic and fax details of the holder, 7.4.5 e-mail address, if any, of the holder, 7.4.6 the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations.	report.
8.	The listed activities, including site preparation, may not commence within 20 (twenty) calendar days from the date of issue of this Environmental Authorisation. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided.	The holder commenced with the approved listed activities in July 2024, almost 10 months after the letter to notify the registered I&APs of this decision was sent. (The I&APs were notified on the 14th of August 2023, and the letter of commencement for site preparation was sent on the 10th of June 2024.) Please refer to proof included as Appendix E to this report. No appeals have been lodged against the EA.

9.	Management of activity The draft or Environmental Management Programme (“EMPr”) submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.	According to the supplied ECO reports the contractor is implementing the EMPr on-site and the contractor has a copy of the approved EMPr at the site camp.
10.	The MMP adopted as part of this Environmental Authorisation must be implemented.	According to the supplied ECO reports the contractor is implementing the MMP on-site.
11.	The EMPr and MMP must be included in all contract documentation for all phases of implementation.	The contractor has electronic copies of the EMPr and MMP available on site at the site camp. It is unclear whether the EMPr and MMP formed part of the tender documentation. According to the ECO report of October 2024 the ECO requested that an environmental file must be placed on site containing all the relevant documentation: • EA • EMPr • MMP • Complaints register • Environmental Induction Register • Method Statement • Incident Reports
12.	Monitoring The holder must appoint a suitably experienced environmental control officer (“ECO”), or site agent where appropriate, before commencement of construction activities to ensure compliance with the provisions of the EMPr and the conditions contained herein. The ECO must conduct site visits and must submit ECO reports on a monthly basis to the competent authority.	Nica Kotze from Guillaume Nel Environmental Consultants was appointed as ECO on the site and submitted monthly reports to DEA&DP.

13.	A copy of the Environmental Authorisation, EMPr, MMP, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request, including a publicly accessible website.	During the site visit and audit, the contractor provided proof that electronic copies of the Environmental Authorisation, EMPr, MMP, informal and formal audit reports. The ECO requested that an Environmental file be placed at the contractors' camp with hard copies of this documentation.
14.	Access to the site referred to in Section C above must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.	Access to the site referred to in Section C is available, the environmental reports will be presented to the Competent Authority who requests to see it.
15.	Auditing In terms of Regulation 34 of the NEMA EIA Regulations, 2014, the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMPr and the MMP. The Environmental Audit Report must be prepared by an independent person (other than the appointed Environmental Assessment Practitioner or Environmental Control Officer) and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014. The Audit Reports must be compiled and subsequently submitted to the Department in the following manner: • The holder must undertake an environmental audit and submit an Environmental Audit Report to the competent authority within 3 (three) months of commencement of construction; and • A final Environmental Audit Report must be submitted within 3 (three) months of completion of the proposed development.	Kapp Environmental Consultants (Pty) Ltd. (KAPPEC) has been appointed on behalf of Breede Valley Municipality (the Applicant) as the independent environmental practitioners to undertake the required 3 months external compliance audit in fulfilment of Condition 15 of the Environmental Authorization (the EA) and Regulation 34 of the NEMA EIA Regulations, 2014 (as amended). The site visit for the audit was conducted on the 6th of November 2024.

	The holder must, within 7 days of the submission of each of the above-mentioned reports to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).	The I&AP's will be notified within 7 calendar days after the submission of the audit reports to the Competent Authority.
16.	Special Conditions Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.	No heritage remains have thus far been discovered.
17.	A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.	This is noted; no heritage remains have thus far been discovered.
18.	The development areas must be clearly demarcated prior to the commencement of construction activities. All areas outside the demarcated areas must be regarded as "no-go" areas.	The construction footprint had not been demarcated prior to commencement. According to the ECO reports, demarcation of the pylon footprints had been requested, but not complied with.

SITE AUDIT FINDINGS

A detailed walkthrough site visit was conducted on the 6th of November 2024 to assess the progress of the ongoing construction activities in line with Condition 15 of the environmental authorization. The auditor was accompanied on site by the contractor's representative to assist in providing additional information on site. The contractors site camp is located at the existing Worcester Industrial substation at the northern end of the distribution line to be constructed. Chemical toilets are in place within the contractors' camp area and all material stockpile laydowns are conducted within this fenced off substation area.

At the time of audit, the construction of the pylon footings has been completed along the entire route including the backfill of these excavations. This activity is deemed the most significant from a biophysical impact perspective and have been completed at the time of audit. As per the available ECO reports, the development footprint for the pylon footings were not demarcated at the time of excavation and demarcations were also not in place during the audit.

The casting of the pylon footings was conducted using pre-mix concrete trucks and thus little to no cement batching was required. No cement residues were noted during the audit. The footings have all been backfilled and at the time of audit the contractor has commenced with the erection of the first pylons, starting from the north at the Worcester Industrial substation. At the time of audit 4 pylons had been erected at pylon locations 6 and 7 per Figure 3 above in this report.

The contractor noted that limited topsoil was unearthed during the excavations given the rocky nature of the area. The ECO reports confirm that the topsoil was stored separately although the stockpiles was not demarcated. The contractor noted the topsoil and best quality material was replaced on top of the backfilled material after completing the casting of the pylon footings. The excavations at the pylon footings furthermore unearthed many riverine rocks, some of which are still in place around the backfilled areas, please refer to the photo pages attached as Appendix A.

The northern section of the route, towards the north and south of Raymond Pollet Drive has previously been heavily disturbed and had been used, presumably by the public, as a waste dumping area, please refer to the photo pages attached as Appendix A. The contractor noted that existing "tweespoor" gravel roads were mostly utilized by the construction vehicles and concrete trucks utilized mostly the existing tar roads from the adjacent industrial area for access.

No dust generation was noted at the time of audit. The ECO has requested that the dust be monitored, and suppression implemented if needed.

Provision has been made for litter and packaging waste within the contractors' camp area with bins in place, this must be emptied and remove timeously to prevent litter and plastics from being blown around.

ENVIRONMENTAL MANAGEMENT PLAN COMPLIANCE

TABLE 3: ENVIRONMENTAL MANAGEMENT PLAN COMPLIANCE

No.	EMP REQUIREMENT	COMPLIANCE FINDING
1.	Site Demarcation and No-Go/Sensitive Areas	
1.1	The surveys for the overall project area and construction footprint as approved in the Environmental Authorisation (EA) must be clearly demarcated before the contractors set up their crew camps or begin construction.	Construction commenced in July 2024. The construction footprint had/has not been demarcated with droppers prior to commencement. According to the ECO reports, the demarcation of the pylon development footprint has been requested but not complied with.
1.2	Stockpiled topsoil should be demarcated with danger tape and seen as no-go areas.	The contractor noted that limited topsoil was unearthed during the excavations given the rocky nature of the area. The ECO reports confirm that the topsoil was stored separately although the stockpiles were not demarcated. The contractor noted the topsoil and best quality material was replaced on top of the backfilled material after completing the casting of the pylon footings.
1.3	These No-go areas must be demarcated with fencing/warning tape and signs before any construction activities commence. The EO and ECO must be on site in order to make sure the correct areas are fully demarcated.	Excavations on site at the time audit was adequately demarcated with orange netting. The ECO reports confirm that the topsoil was stored separately although the stockpiles were not demarcated, nor were the associated development footprints along the route.
1.4	All construction activities must remain within the boundaries of the development area, as demarcated at the start of the construction phase. There must be no vehicular access to the drainage lines outside the development area thus reducing the infringement of the development on natural habitat.	All construction activities have remained within the boundaries of the development footprint. The condition of the riparian and bordering natural habitat has remained the same with no infringement into these areas.
1.5	The construction footprint must be kept to a minimum by constructing boundaries and demarcated areas not to be disturbed.	The construction footprint has remained within the designated development footprint areas, however these were not demarcated

		prior to the commencement of construction activities.
1.6	The reaches of the freshwater ecosystems where no OHPL activities are planned must be considered no-go areas.	The condition of the riparian and bordering natural habitat has remained the same with no infringement into these areas. E
2.	Flora	
2.1	Locally indigenous plants must be used in the landscaping of the site.	Noted, this will be audited post-construction.
2.2	Plants that are proclaimed as problem plants or noxious weeds must be excluded from the landscaping plan and these must be removed immediately, should they occur on site.	No alien vegetation was observed during the site audit.
2.3	No plants/trees may be destroyed prior to notify the ECO about the plan. The ECO is to approve all plants to be removed.	No plants or trees were required to be removed.
2.4	The contractor must rehabilitate the construction camp and any other disturbed areas once construction activities have terminated. Compacted areas will be ripped and mulched in order to ensure recovery of the natural vegetation cover.	The contractors site camp is located within the existing Worcester Industrial substation. No rehabilitation of this area is required.
2.5	Once construction is complete, rehabilitation of un-built areas must be undertaken in order to restore the aesthetic & ecological value of the area. It is recommended that a qualified landscape architect, qualified botanist, aquatic specialist and the ECO be consulted with regard to the most appropriate rehabilitation of vegetation and structures, where agricultural land uses are not proposed. Active re-vegetation must take place with locally indigenous vegetation under the supervision of the ECO.	Noted, this will be audited post-construction.
2.6	No open fires shall be allowed on site under any circumstances, fires will only be permitted in adequate facility within the crew camp, Forest Act, 1984 (Act No. 122 of 1984).	No evidence of fires was observed during the site audit.
2.7	The bulbs in the sensitive area may not be removed and must be	Noted, this will be audited post-construction.

	rehabilitated post-construction.	
3.	Stockpiles	
3.1	All stockpiled material must be easily accessible on site without any environmental damage of the surrounding properties.	A limited amount of stockpiled material from excavations were noted as all the footings have been completed and backfilled at the time of audit. The excavations at the pylon footings furthermore unearthed many riverine rocks which are still in place around the backfilled pylon footing areas.
3.2	All temporarily stockpiled material must be stockpiled in such a way that the spread of materials is minimised. In the case of strong wind and/or rain all stockpiled material must be covered with a tarpaulin in order to prevent erosion. All exposed soils must be protected for the duration of the construction phase with a suitable geotextile (e.g. Geojute or hessian sheeting) in order to prevent erosion and sedimentation of the watercourses in close proximity to these stockpiles.	A limited amount of stockpiled material from excavations were noted as all the footings have been completed and backfilled at the time of audit. The excavations at the pylon footings furthermore unearthed many riverine rocks which are still in place around the backfilled pylon footing areas. No erosion nor sedimentation was observed during the site audit and none was foreseen to occur.
3.3	The stockpiles may only be placed within the demarcated areas, outside of delineated watercourses, the location of which must be approved by the RE, EO or ECO.	Topsoil, subsoil and rocks from the excavations were stockpiled immediately adjacent to the pylon footings and used as backfill upon the completion of casting the footings. No stockpiled material nor disturbances were observed within the drainage lines or Hex River watercourse. The ECO has requested that the stockpiles be adequately demarcated.
3.4	Stockpiles may not exceed 2 metres in height and their footprint should be kept to a minimum.	No stockpiles on site exceeded 2m in height.
3.5	Stockpiling of removed materials may only be temporary and should be disposed of at a registered waste disposal facility.	A limited amount of stockpiled material from excavations were noted as all the footings have been completed and backfilled at the time of audit. The excavations at the pylon footings furthermore unearthed many riverine rocks which are still in place around the backfilled pylon footing areas.

		The approved EMPr states that <i>“soil removed for excavating the foundation pit must be used as backfill material. Any remaining soil following the completion of backfilling of the foundation pits are to be spread out thinly surrounding the installed support structures (outside of the delineated freshwater ecosystems) to aid in the natural reclamation process.”</i> <u>Thus, the ECO will determine whether the excess rocks to be utilized surrounding the footings or potentially removed from site.</u>
3.6	Soils from different horizons must be stockpiled such that topsoil stockpiles do not get contaminated by sub-soil material.	The contractor noted that limited topsoil was unearthed during the excavations given the rocky nature of the area. The ECO reports confirm that the topsoil was stored separately although the stockpiles were not demarcated. The contractor noted the topsoil and best quality material was replaced on top of the backfilled material after completing the casting of the pylon footings.
3.7	Stockpiles are to be stabilised if signs of erosion are visible.	No erosion was observed.
3.8	Topsoil stockpiles must be monitored for invasive exotic vegetation growth. Contractors must remediate.	No topsoil stockpiles were observed on site during the audit.
3.9	No plant, workforce or any construction related activities may be allowed onto the topsoil stockpiles.	No topsoil stockpiles were observed on site during the audit.
3.10	No stockpiles or construction of any hard infrastructure may occur near watercourses.	No stockpiles or any disturbances were observed within the drainage lines or watercourse.
4. 4.1	Topsoil Management All topsoil must be removed prior to the commencement of any development activities. Topsoil must be stockpiled. Stockpiled topsoil must be regarded as no-go areas.	A method statement for the clearance and stockpiling of topsoil was submitted by the contractor. The contractor noted that limited topsoil was unearthed during the excavations given the rocky nature of the area. The ECO reports confirm that the topsoil was stored separately although the stockpiles were not demarcated. The contractor noted the topsoil

		and best quality material was replaced on top of the backfilled material after completing the casting of the pylon footings.
4.2	Stockpiled topsoil must be monitored for invasive exotic vegetation growth. Contractors must remediate as and when required in consultation with the EO, RE and ECO.	No topsoil stockpiles were observed on site during the audit.
4.3	No plant, workforce or any construction related activities may be allowed onto the windrowed topsoil.	No topsoil stockpiles were observed on site during the audit.
4.4	All topsoil must be replaced during the rehabilitation phase to ensure the re-establishment of natural vegetation.	The contractor noted the topsoil was replaced on top of the backfilled material.
4.5	Handling of the topsoil should be minimised and should therefore only be handled before construction (to be windrowed) and after construction (topsoil to be replaced).	No topsoil stockpiles were observed on site during the audit.
5.	Oil and Chemicals	
5.1	These substances must be confined to specific and secured areas within the contractor's camp, and in a way that does not pose a danger of pollution even during times of high rainfall.	No fuel bowsers or storage tanks were observed during the audit.
5.2	Drip trays (minimum of 10cm deep) must be placed under all machinery and vehicles. The surface area of the drip trays will be dependent on the vehicle and must be large enough to catch any hydrocarbons that may leak from the vehicle while standing. The depth of the drip tray must be determined considering the total amount / volume of oil in the vehicle. The drip tray must be able to contain the volume of oil in the vehicle.	Lockable storage containers are located at the site camp which contains the hydrocarbons. No machinery is presently stored within the site camp area.
5.3	Any spills larger than 100ℓ should be reported to all local authorities. Spill kits must be available on site and in all vehicles that transport hydrocarbons for dispensing to other vehicles on the construction site. Spill kits must be made up of material/product that is in line with environmental best practice (sunsorb is a recommended	No other machinery and vehicles were observed during the site audit. Lockable storage containers are located at the site camp which contains the hydrocarbons. No spills were observed throughout the site, nor reported in the ECO reports.

	product that is environmentally friendly).	
5.4	All spilled hazardous substances must be contained in impermeable containers for removal to a General & Hazardous Waste Landfill site, (this includes contaminated soils, and drenched spill kit material).	Lockable storage containers are located at the site camp which contains the hydrocarbons. No spills were observed throughout the site, nor reported in the ECO reports.
5.5	Vehicles to be serviced at the contractor laydown area and all refuelling to take place outside of the watercourses and the applicable variable buffer.	No vehicles are serviced at the site camp and no fuel bowzers or storage tanks were observed during the audit.
6.	Method Statements The ECO will evaluate the method statement and ensure that it covers the handling of the following aspects: • Emergency spills procedures for the contamination of soils from spills and fire. • Handling & storage of oils and chemicals. • Cement and concrete batching, which includes the storage, washing & disposal of cement, packaging, tools and plant. • Diesel tanks and refuelling procedures. • Crew camps and construction lay down areas. • Workshop maintenance and cleaning of plant.	The ECO requested that digital method statements be submitted addressing all the required construction aspects. The contractor supplied the following digital Method Statements: • Topsoil Management • Hazardous Storage and Waste Disposal • Management of Cement and the Pumping of Ready-Mix Concrete • Spillage Management
7.	Cement	
7.1	It is suggested that ready-mix cement be used as far as possible to minimize the possible impact on the surrounding environment.	Pre-mix concrete via trucks was utilized for the pouring of the pylon footings. No cement batching was active during the site audit.
7.3	Proper handling and disposal should minimise or eliminate discharges into watercourses.	Pre-mix concrete via trucks was utilized for the pouring of the pylon footings. No cement remains were observed during the site audit nor any pollution of the watercourse.
7.4	Fresh concrete and cement mortar should not be mixed below the	No cement batching was active during the site audit and pre-mix

	modelled 1:100-year flood line and at least 32 m from the delineated extent of the Hex River. Mixing of cement may be done within the construction camp, may not be mixed on bare soil, and must be within a lined, bound or bunded portable mixer. Consideration must be taken to use ready mix concrete.	concrete was utilized for the casting of the footings.
7.5	No mixed concrete shall be deposited directly onto the ground. A batter board or other suitable platform/mixing tray is to be provided onto which any mixed concrete can be deposited whilst it awaits placing.	No cement batching on the ground was conducted. Pre-mix concrete was utilized.
7.6	Cement bags must be disposed of in the demarcated hazardous waste receptacles and the used bags must be suitably disposed of.	No cement batching was active during the site audit and pre-mix concrete was utilized for the casting of the footings. No cement bags were noted during the audit.
7.7	Spilled or excess concrete must be disposed of at a suitable landfill site.	No cement batching was active during the site audit. No physical cement remains nor spills were observed during the site audit.
7.8	Cement batching areas must be located in consultation with the RE, EO or ECO to ensure residues are contained and that the proposed location does not fall within sensitive areas such as drainage lines, storm water channels, etc.	No cement batching was active during the site audit and pre-mix concrete was utilized for the casting of the footings.
7.9	The mixing of concrete shall only be done at selected sites on mortarboards or similar structures to contain run-off into natural vegetation, soils and streams leading to the river. Cleaning of cement mixing and handling equipment shall be done using proper cleaning trays.	No cement batching was active during the site audit and pre-mix concrete was utilized for the casting of the footings.
7.10	Cleaning of cement mixing and handling equipment shall be done using proper cleaning trays.	No cement batching was active during the site audit and pre-mix concrete was utilized for the casting of the footings.
7.11	All empty containers must be stored in a dedicated area and later removed from the site for appropriate disposal at a Licensed Landfill site.	No cement batching was active during the site audit and no cement bags were noted during the audit.

7.12	All empty cement bags are to be picked up immediately to ensure that cement dust is not blown away. Empty cement bags are to be stored in a weather and scavenger proof bin, in order to prevent leaching and groundwater contamination.	No cement batching was active during the site audit and no cement bags were noted during the audit.
7.14	Washing of the remains into the ground is unacceptable.	No cement remains were observed during the site audit or pollution of the watercourse.
8.	Dangerous and Toxic Materials	
8.1	Materials such as fuel, oil, paint, herbicide and insecticides must be sealed and stored in bermed areas or under lock and key, as appropriate, in well-ventilated areas.	Lockable storage containers are located at the site camp, and all chemicals and materials are stored within these containers which is deemed appropriate.
8.2	Storage facilities should be bunded, roofed, secure, rain, wind and tamper-proof.	Lockable storage containers are located at the site camp, and all chemicals and materials are stored within these containers which is deemed appropriate.
8.3	Storage areas shall display the required safety signs depicting “no smoking”, “No Naked lights” and “Danger” containers shall be clearly marked to indicate contents as well as safety requirements.	Signage has been displayed at the entrance to the site, as well as on the internal fence of the contractors’ camp area within the Worcester Industrial Substation.
8.4	Sufficient care must be taken when handling these materials to prevent pollution. Training on the handling of dangerous and toxic materials must be conducted for all staff prior to the commencement of construction. In the case of pollution of any surface or groundwater, the Regional Representative of the Department of Water and Sanitation (DWS) must be informed immediately.	No chemical pollutants or remains were observed during the site audit.
8.5	Paint, herbicide and insecticides will not be allowed on or near the site.	Noted, no such chemicals were observed. The containers were locked, the auditor did not request to look over the inventory.
9.	Bulk Storage of Fuels and Oils	
9.1	Bulk fuel storage tanks on the site shall be on an impervious surface that is bunded and able to contain at least 110% of the	No bulk fuel storage tanks or bowsers were observed on site during the audit.

	volume of the tanks.	
9.2	Bulk fuel storage tanks shall be located in a portion of the construction camp where they do not pose a high risk in terms of water pollution.	No bulk fuel storage tanks or bowzers were observed on site during the audit.
9.3	Bulk fuel storage tanks shall be placed so that they are out of the way of traffic, so that the risk of the tanks being ruptured or damaged by vehicles is minimised.	No bulk fuel storage tanks or bowzers were observed on site during the audit.
9.4	Bulk fuel storage should be covered during the rainy season.	No bulk fuel storage tanks or bowzers were observed on site during the audit.
10.	Use of Dangerous and Toxic Materials	
10.1	The contractor shall keep the necessary materials and equipment on-site to deal with spills/fires of the materials present should they occur.	The necessary emergency equipment and spill kits are available at the site camp. No spills have been recorded or reported on-site.
10.2	The contractor shall set up a procedure for dealing with spills/fires, which will include notifying the ECO and the relevant authorities prior to commencing with construction. These procedures must be developed in consultation and approval by the appointed EO. All staff should receive some form of fire training.	An incident reporting system must be established and included in the on-site file. This has been requested by the ECO although this was not seen at the time of audit on the available documentation.
10.3	Fire buckets and hoses shall be in good working order and easily accessible on site.	The necessary emergency equipment and spill kits are available at the site camp.
11.	Contractors Camp Site and Crew Camps	
11.1	The Contractor shall, in conjunction with the EO, designate the restricted eating area for eating during normal working hours. Two refuse bins with lids must be provided and cleaned on a daily basis. The bins are to be secure, wind, weather and scavenger proof. Designated areas for smoking must be provided.	Lockable storage containers as well as one wheelie bin with a lid were noted within the contractors site camp area. Some overflow of waste and packaging materials were noted at the wheelie bin and must be removed from site as the need occurs.
11.2	No fires are to be lit outside of a facility designed to contain fires.	No evidence of fires was observed during the site audit.

	The adequacy and positioning of these structures must be determined in consultation with the EO and ECO.	
11.3	No animals, domestic or otherwise are allowed on the premises. The feeding, or leaving of food, for stray or other animals in the area is strictly prohibited.	No evidence of domestic animals was observed during the site audit.
11.4	Litter (even if originating outside the camp) and concrete bags etc. must be picked up and put into suitably closed bins. The contractor shall provide labourers to clean up the contractor's camp and construction site on a daily basis. These areas shall then be inspected by the contractor or his/her ESO to ensure compliance with this requirement. Rubble and litter must be removed every two weeks or more often as the need arises and be disposed of at a registered landfill site as designated by the Breede Valley Municipality, Solid Waste removal department.	Based on the ECO report provided and the site audit, the appropriate bins are in place on-site. Some overflow of waste and packaging materials were noted at the wheelie bin and must be removed from site as the need occurs.
11.5	Accommodation for members of the workforce will not be permitted on site unless authorisation has been given in terms of the Environmental Authorisation issued for the site.	Noted, no accommodation for members of the workforce was provided.
11.6	Dedicated wash areas must be situated away from surface water sources.	Noted, no washing areas have thus far been required.
11.7	The contractor's camp shall be monitored for dust fallout and dust suppression applied as required. This may include the laying of gravel, the use of grey water can be considered as an option if the required permits have been acquired.	No dust fallout has been reported nor is it expected to occur as the substation footprint surface has remained as is.
11.8	The contractor's camp, offices and storage facilities shall be located within the site boundaries. If this is not feasible an alternative should be designated in consultation with the ECO.	The contractors site camp is located at the existing Worcester Industrial substation.
11.9	The contractor shall provide labourers to clean up the contractor's camp and construction site on a daily basis. These areas shall then	The contractors site camp is located at the existing Worcester Industrial substation. Based on the ECO report provided and the

	be inspected by the contractor or his/her ESO to ensure compliance with this requirement.	site audit, the appropriate bins are in place on-site. Some overflow of waste and packaging materials were noted at the wheelie bin and must be removed from site as the need occurs.
12.	Ablution Facilities	
12.1	The contractor will be responsible for providing all sanitary arrangements for his and the sub-contractors team. It is proposed that that one toilet for 15 people will be established on site.	Two chemical toilets have been provided by the contractor within the site camp near the current works. No additional toilets were required at the time of the audit as the only work currently underway was near the contractor's camp.
12.2	Sanitary arrangements shall be to the satisfaction of the ECO and the local authority. The contractor shall keep the toilets in a clean, neat and hygienic condition. The contractor shall supply toilet paper at all toilets at all times. Toilet paper dispensers shall be provided in all toilets.	Chemical toilets are in good clean condition.
12.3	Toilets provided by the contractor must be easily accessible and a maximum of 150m from the works area to ensure they are utilised. All toilets will be located within the contractor's camp. Should toilets be needed elsewhere, their location must first be approved by the ER, ECO.	Two chemical toilets have been provided by the contractor within the site camp near the current works. No additional toilets were required at the time of the audit as the only work currently underway was near the contractor's camp.
12.4	The contractor (who must use reputable toilet-servicing company) shall be responsible for the cleaning, maintenance and servicing of the toilets. The contractor (using reputable toilet-servicing company) shall ensure that all toilets are cleaned and emptied before the builders' or other public holidays.	Chemical toilets are in good clean condition.
12.5	Toilets out on site must be secured to the ground and have a sufficient locking mechanism operational at all times.	Two chemical toilets have been provided by the contractor within the site camp. The two toilets were placed on wooden pallets and secured to the ground using wire.
12.6	The natural surrounding area may NOT be used for any ablution activities.	Noted. This has not been observed or reported on.

13.	Dust	
13.1	Water extraction from the non-perennial storm water channel will not be allowed.	Noted, no water abstraction from any watercourses have occurred on site.
13.2	Potable water may not be used as a means of dust suppression, alternative measures must be sourced. The use of 'grey' water must be investigated as an alternative. The contractor will be responsible to source this water and obtain the required approvals. Dust mitigation measures to include the use of chemical dust suppressants, such as Lignosulphonates; and the use of soil stabilisers such as straw for large open ground areas.	No dust generation was noted at the time of audit. The ECO has requested that the dust be monitored, and suppression implemented if needed.
13.3	The construction camp shall be treated with dust suppression during dry and windy conditions to control dust fallout. Dust production must be controlled by regular dust suppression of roads and works area, should the need arise. (NB: Concrete dust is toxic and damages soil properties. Therefore dust suppression to prevent dust spread must not be done where concrete dust has fallen or it will infiltrate into the soil. Concrete bags must not be allowed to blow around the site and spread cement dust.)	No dust fallout has been reported nor is it expected to occur as the substation footprint surface has remained as is. The ECO has requested that the dust be monitored, and suppression implemented if needed. No dust generation was noted at the time of audit.
13.4	At the end of construction, the site camp must be fully rehabilitated by removing the temporary surface, and ripping the area to loosen the soil and the area must be re-vegetated with locally indigenous vegetation only, according to the landscape development plan for the project.	No dust fallout has been reported nor is it expected to occur as the substation footprint surface has remained as is. Any required rehabilitation will commence after the completion of work.
13.5	All vehicles transporting material that can be blown off (e.g. soil, rubble etc.) must be covered with a tarpaulin, and speed limits of 20 km/h must be adhered to.	Noted. No vehicles carrying material was noted during the site audit.
14.	Noise	
14.1	Work hours during the construction phase shall be strictly enforced	All construction activities have been restricted to normal working

	unless permission is given (07H00 – 18H00). Permission shall not be granted without consultation with the local industries and businesses by the EO. No work to be done on Sundays. The EO must inform the residents of houses and businesses adjacent to the development in writing 24 hours prior to any planned activities that will be unusually noisy or any other activities that could reasonably have an impact on the adjacent sites. These activities could include, but are not limited to use of pneumatic jack-hammers and compressors etc. No noise louder than 70dB from the ambient noise level.	hours.
14.2	Noise reduction is essential, and contractors shall endeavour to limit unnecessary noise, especially loud talking, shouting or whistling, radios, sirens or hooters, motor revving, etc. The use of silent compressors is a specific requirement. All machinery to be muffled where possible.	Noted, no noise complaints have been noted or received. No machinery was being utilized on site at the time of audit.
15. 15.1	Visual Management Shade cloth must be utilised to conceal and minimise the visual impact of contractor camps, lay down and storage areas.	The contractors' site camp is located at the existing Worcester Industrial substation. Storage containers and material laydown areas are in place within the substation area. No shade cloth is used to conceal the contractors' site camp as it is within the formal fencing of the Worcester Industrial substation and is not near any sensitive visual receptors such as residential areas or busy public roads. This is not deemed necessary.
15.2	Unified materials must be used in the construction of the buildings on-site	Noted, no buildings will be constructed.
16. 16.1	Fires Fire training and equipment to be nearby to put fires out. The Contractor shall ensure that there is appropriate fire-fighting equipment available on site at all times.	The necessary fire-fighting equipment is present on-site within the lockable containers and the appropriate signage for the equipment has been added to the container.

16.2	Fires must be within designated areas and must be in small scale. Absolutely no burning of waste is permitted.	No evidence of fires was observed during the site audit.
16.3	Fires will only be allowed in facilities especially constructed for this purpose within fenced Contractor's camps. Wood and/or charcoal are the only fuels permitted to be used for fires. The contractor must provide sufficient wood (fuel) for this purpose. Fires in the designated areas must be small in scale so as to prevent excessive smoke being released into the atmosphere. Heavy smoke may not be released into the air.	No evidence of fires was observed during the site audit.
16.4	No felling of trees or wood collection is allowed from private or public property.	No felling of trees or wood collection was undertaken.
17.	Erosion and Sedimentation	
17.1	To reduce the loss of material by erosion, the contractor shall ensure that disturbance on site is kept to a minimum. The disturbance especially includes the movement of heavy vehicles. These areas must be cordoned off so that vehicles or construction personnel cannot gain access to these areas.	No erosion or sedimentation was observed during the site audit. Most of the works areas are accessed through the tar roads from the industrial area, and the existing "tweespoor" roads on site.
17.2	The contractor shall be responsible for rehabilitating all eroded areas in such a way that the erosion potential is minimised after construction has been completed. These areas are to be filled with mulch or funnels constructed to route the water. All disturbed areas that will not be rehabilitated within the construction phase, must be mulched to encourage vegetation re-growth. Mulch used must be free from alien seed.	No erosion or sedimentation was observed during the site audit. Should any erosion or areas prone to erosion be evident prior to the completion of work, this must be remediated.
18.	Fauna	
18.1	All possible sensitive faunal species present on the site must be rescued and relocated to another suitable location prior to the commencement of construction activities. They can be re-located	No reports of any faunal encounters were conveyed or recorded.

	to the wetland area in the Wellington Industrial Park.	
18.2	All construction workers must be informed that the intentional killing of any animal is not permitted as faunal species are a benefit to society.	Noted, all construction workers are aware of this as per the induction and no killing, hunting or trapping of animals has occurred.
18.3	If avian SCC nests are located, a qualified avifaunal specialist must be consulted to determine the best management options. If nests are known to have nestlings or eggs within, these should be allowed to fledge prior to the nest removal.	No avian SCC nests or nests in general have been reported or observed.
18.4	Should any nests of avifaunal species protected under the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) or the Western Cape Nature Conservation Laws Amendment Act, 2000 (Act No. 3 of 2000) be encountered, construction should be halted to determine if there is activity at the nest, if there is then construction should be moved further away until the nesting attempt has failed or succeeded.	No avian SCC nests or nests in general have been reported or observed.
18.5	Any structures which may act as perching sites for birds should be installed with anti-perching spikes.	Noted, the ECO has not reflected on this, nor was perching sites observed during the site audit.
18.6	Anti-collision devices (bird flappers) should be installed where the proposed powerline transverses the Hex River and 30m either side of the river. These must be Eskom approved anti-collision devices that are durable as the area is prone to strong winds. Anti-collision devices must be installed as soon as the wires are strung. The devices must be installed 5m apart and alternate between a light and dark colour in order to increase the visibility of the earth wires	Pylons and cables have not yet been installed over the Hex River. This will be audited at a later stage.
18.7	Bird nests on powerlines are potential fire hazards and should be removed from structures regularly (should nests be those of SCC species permits from Cape Nature or DFFE will be required before disturbing the nests).	No nests were observed during the site audit. Pylons and cables have not yet been installed over the Hex River.

19.	Hydrology	
19.1	Increased run-off during construction must be managed using berm and other suitable structures as required to ensure flow velocities are reduced; this must be done in consultation with the Resident engineer as well as the ECO. The Contractor shall take reasonable measures to control the erosive effects of storm water runoff.	No run-off structures have been required to manage runoff from the footings during construction. This is due to the very limited footprint which has been hardened, and the water is still allowed to soak into the land in the area on which the water fell.
19.2	Storm water, wherever possible, should be allowed to soak into the land in the area on which the water fell.	Due to the very limited footprint which has been hardened, the water is still allowed to soak into the land in the area on which the water fell.
19.3	Clear areas for the proposed construction in a phased manner and retain as much indigenous vegetation as possible.	Noted, only the required footprint is cleared as the pylon construction progresses.
19.4	In the event of pollution caused as a result of construction activities, the contractor, according to section 20 of the National Water Act, 1998 (Act No. 36 of 1998) shall be responsible for all costs incurred by organisations called to assist in pollution control and/or to clean up polluted areas and water courses.	No pollution was observed during the site audit and no work was undertaken within the watercourse.
19.5	The contractor shall ensure that excessive quantities of sand, silt and silt-laden water do not enter the non-perennial watercourse found on site. No wastewater may run freely into the surrounding area.	No sedimentation was observed during the site audit. No works in watercourses are proposed in the project. No wastewater runs freely on the site.
19.6	Construction in the Watercourse must be done during the drier months of the year.	Pylons have not yet been installed over the Hex River. This will be audited at a later stage.
19.7	Small scale rehabilitation of the banks must be done. This includes alien vegetation clearance and active revegetation.	This will be audited at a later stage.
20.	Soil	
20.1	Topsoil must be stripped from all areas that are to be utilized during the construction period and where permanent structures and access is required. These areas will include comprising the	A method statement for the clearance and stockpiling of topsoil was submitted by the contractor. The contractor noted that limited topsoil was unearthed during the excavations given the rocky

	permanent works, pipeline trenches, stockpiles, access roads, construction camps and lay down areas.	nature of the area. The ECO reports confirm that the topsoil was stored separately although the stockpiles were not demarcated. The contractor noted the topsoil and best quality material was replaced on top of the backfilled material after completing the casting of the pylon footings.
20.2	Topsoil must be deemed to be the top layer of soil containing organic material, nutrients and plant grass seed. For this reason, it is an extremely valuable resource for the rehabilitation and vegetation of disturbed areas. At the beginning of the construction phase, topsoil removed for vegetation clearance must be stripped to a minimum depth of 300 mm and windrowed.	According to the ECO reports, topsoil was stripped prior to construction. The method statement indicated that the top 150 mm of soil will be removed and stockpiled.
20.3	All topsoil must be removed and stockpiled on the site. However, the use of topsoil for rehabilitation contaminated by the seed of alien vegetation must not be permitted unless a programme to germinate the seed and eradicate the seedlings is drawn up and approved, or some other mitigatory feature is found. This must be approved by the ECO.	A method statement for the clearance and stockpiling of topsoil was submitted by the contractor. The contractor noted that limited topsoil was unearthed during the excavations given the rocky nature of the area. The ECO reports confirm that the topsoil was stored separately although the stockpiles were not demarcated. The contractor noted the topsoil and best quality material was replaced on top of the backfilled material after completing the casting of the pylon footings.
20.4	Backfill will require contouring to ensure that it blends in with the surrounding environment.	Backfilling of the excavated areas has been completed.
20.5	Soil removed for excavating the foundation pit must be used as backfill material. Any remaining soil following the completion of backfilling of the foundation pits are to be spread out thinly surrounding the installed support structures (outside of the delineated freshwater ecosystems) to aid in the natural reclamation process.	Soil excavated has been stockpiled adjacent to the excavation of each footing site and reused to backfill the site after the casting of the footings. The ECO will determine whether the excess rocks to be utilized surrounding the footings or potentially removed from site.
20.6	The construction footprint must be limited to the foundation pit area	Noted. As the footprints for each footing excavation were not

	and an additional 5 m buffer (to allow for the stockpiling and movement of personnel).	demarcated, this is not auditable at this stage, given that the footings have all been backfilled.
20.7	All developed areas associated with the support towers must be compacted to natural soil compaction levels to prevent the formation of preferential surface flow paths and subsequent erosion. Conversely, areas compacted as a result of construction activities must be loosened to natural soil compaction levels. Support tower vertices must be stabilised against soil erosion by piling cobbles around the vertices and these piles must be monitored during the operation phase and repacked if necessary.	Soil excavated has been stockpiled on site and reused to backfill the site after the footings were completed. Some of the footing platforms are elevated and these areas must be monitored for potential erosion.
21.	Freshwater Management Measures	
21.1	Contractor laydown areas, vehicle re-fuelling areas and material storage facilities to remain outside of the freshwater ecosystems and their associated 32 m NEMA exclusion buffer and outside of the 100 m GN509 ZoR (due to the potential risk of pollution associated with these dangerous goods).	The contractor's camp is located at the existing Worcester Industrial Substation and far outside the 32m regulation zone of the water course and drainage lines. During the audit the contractor was busy with the backfilling of the pylon bases, no works were done near the watercourse.
21.2	Removed vegetation must be stockpiled outside of the delineated boundary of the freshwater ecosystem. The footprint areas and height of these stockpiles must be kept to a minimum. Should the vegetation not be suitable for reinstatement after the construction phase or be alien/invasive vegetation species; the material must be disposed of at a registered garden refuse site a.s.a.p. and may not be burned or mulched on site;	No vegetation stockpiles were observed during the site audit, and this is not mentioned in any of the audits.
21.3	The clearing of vegetation must be limited to woody vegetation above a certain minimum clearance height within a strip width not exceeding 4 m wide and must remain within the proposed road/jeep track servitude only and may not extend beyond this area. No unnecessary disturbance within the active channel of the EDLs will	No vegetation stockpiles were observed during the site audit. No works within the watercourse has occurred. The vegetation clearance on site has been limited to the footprints and of the pylon footings and its required buffers.

	be acceptable and lower lying shrub growth must be retained both within the freshwater ecosystems as well as their immediate catchment to afford them protection from erosion and sedimentation.	
21.4	The EDL and braided channel must be suitably rehabilitated in terms of erosion control, alien vegetation removal and reinstatement of indigenous vegetation.	Noted, rehabilitation will occur after the completion of work.
21.5	Excavation of foundation pits for the support structure foundations may result in loose sediments within the landscape, specifically if works are taken during a period of rainfall. As such, sediment traps should also be installed downstream/downgradient of the construction area (where practically feasible). Sediment traps can be created by pegging an appropriate geotextile across the entire width of the work area at the specified support tower, held down by cobbles/boulders or by geotextile wrapped hay bales spanning the width of the work area and staked into position.	At the time of the audit the backfilling of the footings had been completed. No sediment traps have been installed nor have been required.
21.6	During excavation activities, soil must be stockpiled upgradient of the excavated area and not in close proximity to the freshwater ecosystem. Mixture of the lower and upper layers of the excavated soil must be kept to a minimum, so as to ensure successful revegetation using the top layer after construction. Local soil must be used to backfill the foundation pits (support structures), immediately after installation of the support structures and/or other infrastructure.	A method statement for the clearance and stockpiling of topsoil was submitted by the contractor. The contractor noted that limited topsoil was unearthed during the excavations given the rocky nature of the area. The ECO reports confirm that the topsoil was stored separately although the stockpiles were not demarcated. The contractor noted the topsoil and best quality material was replaced on top of the backfilled material after completing the casting of the pylon footings. No stockpiling of material was done near the watercourse.
21.7	Bedding material (at the bottom of the excavated foundation pit) must be stockpiled outside of the 32 m NEMA ZoR but as close as possible to the support structures footprint area and backfilled	No bedding material was utilized or stockpiled on site.

	immediately after excavation has been completed.	
21.8	When the powerline is strung between the support structures, no vehicles may indiscriminately drive through the freshwater ecosystems, use must be made of the dedicated access roads.	The powerline is yet to be strung and this will be audited at a later stage.
22.	Botanical	
22.1	Site access routes- The sites for the pylon construction should be accessed from the existing road, immediately to the east of the high sensitivity portion of the study area, south of the R60. A new road should not be constructed.	No new roads were constructed south of the R60. Only short gravel service accesses were created from the existing tar road in the east to the pylon footings (shortest distance). Please refer to the photo pages attached as Appendix A.
22.2	The vegetation is relatively low, meaning that with some care in selecting the exact access routes, it should not be necessary to brush-cut the vegetation or engage in earthworks when establishing the access routes.	No new roads were constructed south of the R60. Only short gravel service accesses were created from the existing tar road in the east to the pylon footings (shortest distance). Please refer to the photo pages attached as Appendix A.

CONCLUSION

Based on the documentation obtained and the detailed site visit conducted on the 6th of November 2024, the applicant has sufficiently complied with the conditions of the Environmental Authorisation and EMPr. Furthermore, the EMP is considered adequate and effective to manage and mitigate the activities.

No specific contradictions between the EA and EMP were noted. The EA has, likely due to a typographical error, incorrectly listed two instances of Activity 12 from Listing Notice 1, while omitting Activity 11.

This external audit report did not identify any significant non-compliance with the conditions of the Environmental Authorisation.

The outcome of this audit has not found insufficient mitigation of environmental impacts associated with the undertaking of the listed activities, nor has it found insufficient levels of compliance with the Environmental Authorisation. As such a public participation process in terms of Regulation 34(5) will not be undertaken.

In compliance with regulation 34(6) the holder of the EA must within 7 days of the date of submission of an environmental audit report to the competent authority, notify all potential and registered interested and affected parties of the submission of that report, and make such report immediately available –

- (a) to anyone on request; and
- (b) on a publicly accessible website, where the holder has such a website.

Compiled by:

A handwritten signature in black ink, appearing to be 'Renier Kapp', written over a light blue grid background.

Renier Kapp
for KAPPEC

ANNEXURE A – SITE PHOTOGRAPHS



The entrance gate to the Worcester Industrial substation where the contractors camp is located.



Notice board at entrance to the Worcester Industrial substation.



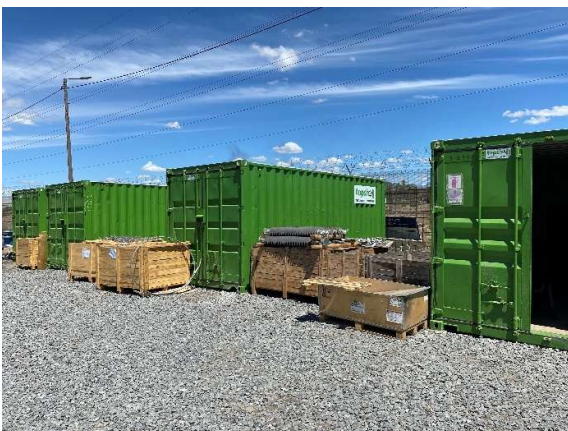
Chemical toilets in places within the Worcester Industrial substation.



Contractors camp containing appropriate lockable storage containers.



Contractors camp where the office containers are located.



Contractors camp containing appropriate lockable storage containers.



Litter bin within the contractors camp with litter discarded on the side due to overflow.



Litter bin within the contractors camp with litter discarded on the side due to overflow.



Electrical cable drums within the contractors camp at the Worcester Industrial Substation.



Electrical cable drums within the contractors camp at the Worcester Industrial Substation.



Worcester Industrial Substation internal gate.



Constructed pylon footing and pylon 1 next to it within the Worcester Industrial Substation.



Excavations for future lines, appropriately demarcated.



Excavations for future lines, appropriately demarcated.



Pylon 4 per Figure 3 with porcelain insulator used to isolate the power wires at the edges.



Worcester Industrial Substation boundary fence with pylon 3 in the back of picture within.



Pylon 5 per Figure 3 which has been placed on site at its completed footing.



The condition of the site as seen from Pylon 5 east towards Pylon 6, note the excavated rock substrate.



The condition of the site as seen from Pylon 5 east towards Pylon 6, note the excavated rock substrate.



Pylon 5 per Figure 3 which has been placed on site at its completed footing.



Test holes along the route near pylon 5, sufficiently demarcated.



Manhole at pylon 5.



Test hole near pylon 6 as seen towards the west along the existing Eskom service road.



Two pylons erected at location 6, as seen southeast towards pylon location 7 in the back of picture.



Underneath the existing distribution line between pylons 6 and towards pylon 7 (southeast).



The existing roads and disturbed conditions towards the north of Raymond Pollet Drive near pylon 7.



North of Raymond Pollet Drive where the area was used as a waste dumping area



North of Raymond Pollet Drive where the area was used as a waste dumping area.



From pylon 8 as seen towards the south showing the derelict condition of this specific area.



Pylon 9 on site adjacent to the footing as seen towards the south towards Raymond Pollet Drive.



From pylon 9 footing towards the southwest along the existing gravel road towards Raymond Pollet Drive.



From pylon 10 footing seen towards the north towards Raymond Pollet Drive.



From pylon 10 as seen towards the north towards the south across the Hex River in the back of picture.



From pylon 10 footing as seen towards the west towards the Worcester industrial area off Maritz Street.



East of pylon 10 seen towards the north towards Raymond Pollet Drive bridge showing the Hex River.



Stormwater outlets from the industrial area adjacent to Ceres near pylon 11.



Completed casting and backfill of the pylon at location 12 along the industrial boundary (immediately east).



Completed casting and backfill of the pylon at location 12 along the industrial boundary (immediately east).



The tweespoor gravel road used as access immediately east of the industrial area seen towards the south.



The tweespoor gravel road used as access immediately east of the industrial area seen towards the north.



Completed footing and backfill at pylon location 13 immediately southeast of Carr Street.



Completed footing and backfill at pylon location 13 as seen towards the southeast toward the Hex River.



Completed footing and backfill at pylon location 14 as seen towards the southeast toward the Hex River.



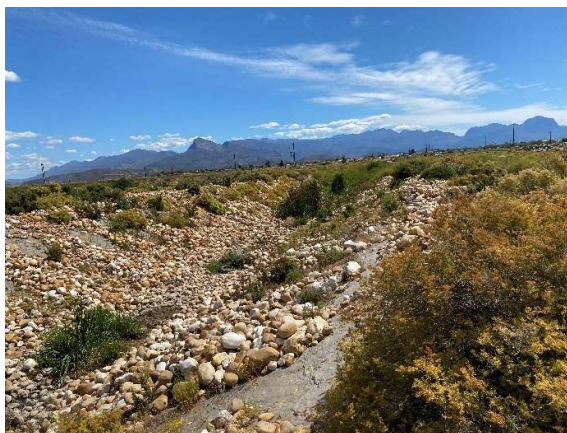
Pylon location 14 as seen towards the southwest towards Robertson Road (R60).



Existing gravel roads along the north of pylon 14.



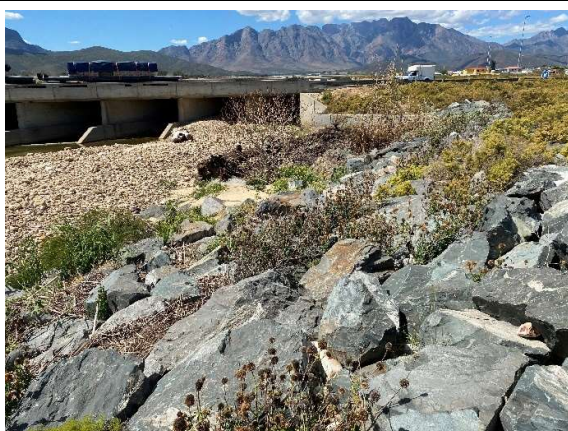
Existing stormwater drainage channel immediately north of Robertson Road (R60).



Existing stormwater drainage channel immediately north of Robertson Road (R60).



Temporary access from south of Robertson Road (R60).



The condition of the Hex River and its banks immediately downstream of Robertson Road (R60).



The condition of the Hex River and its banks immediately downstream of Robertson Road (R60).



Short service access road created to pylon 16 from the Transhex main (tar) access road.



Short service access road created to pylon 16 from the Transhex main (tar) access road.



Completed footing and backfill at pylon location 17 as seen towards the southeast.



Completed footing and backfill at pylon location 17 as seen towards the east.



Test hole excavations along the route between pylons 18 and 21 sufficiently demarcated and limited.



Test hole excavations along the route between pylons 18 and 21 sufficiently demarcated and limited.



Condition of the undisturbed surrounding natural area where test holes were dug and demarcated.



Existing excavated stormwater drainage channel from the Transhex development seen towards the southwest.



Completed pylon footing 21 and the pylon. Note the excavated rocks present at most excavations.



Within Transhex substation.



Within Transhex substation.



Within Transhex substation.