

	<p style="text-align: center;">Scope of Work</p>	<p style="text-align: center;">Matimba Power Station</p>
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Title: **Demolition and Removal of Asbestos and Asbestos Containing Materials from Eskom Houses.**

Document Identifier: **SOW/173/002**

Plant Location: **N/A**

Area of Applicability: **Matimba Power Station**









Functional Area Applicability: **Engineering**

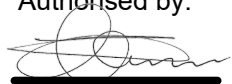

Revision: **02**

Total Pages: **33**

Report Date: **October 2022**

Disclosure Classification: **Controlled Disclosure**

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1. INTRODUCTION

Eskom owns a number of asbestos-containing houses in the residential area of Onverwacht. These houses were initially constructed to provide accommodation for Eskom employees during early construction and subsequent operational life of Matimba Power Station. In recent years, the government has passed new regulations for abatement and phase-out of asbestos containing materials. Consequently, the asbestos-containing materials in the Eskom houses must be removed to ensure compliance with the recent regulations for abatement of asbestos. This document details the scope of work to be implemented to safely remove, transport and dispose of all the asbestos material and other resulting waste from all the asbestos-containing houses marked by Eskom for demolition and removal of asbestos and asbestos-containing materials.

2. SUPPORTING CLAUSES

2.1 Scope

2.1.1 Purpose

The purpose of this document is to detail the scope of work (SOW) required to safely remove, transport and dispose of all the asbestos, asbestos-containing material (ACM) and any other waste which may result from demolition of all Eskom asbestos houses located in Onverwacht. A list of all 143 houses (including their addresses) to be demolished forms part of this SOW document and is included in the attachments to the SOW document.

2.1.2 Applicability

This report is applicable to Matimba Power Station.

2.2 References

2.2.1 Normative

- [1] Modifications for Private Garages. *Refer to drawings/sketches attached to this document.*
- [2] 32-303: Requirements for the Safe Processing, Handling, Storage, Disposal and Phase-out of Asbestos *Revision 2.*
- [3] Government Notice Regulation 1196 of 2020: Asbestos Abatement Regulations.
- [4] PS/244/001: Matimba Waste Management Procedure.

2.2.2 Informative

- [1] Occupational Health and Safety Act 85 of 1993.
- [2] Government Notice Regulation 84 of 2014: Construction Regulations.
- [3] SANS 10400: National Building Regulations.

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2.3 Abbreviations

AAR	: Asbestos Abatement Regulations per GNR 1196 of 2020.
ACM	: Asbestos Containing Material
AIA	: Approved Inspection Authority
GNR	: Government Notice Regulation (GNR 1196)
OEL	: Occupational Exposure Limit
POW	: Plan of Work
PPE	: Personal Protective Equipment
QCP	: Quality Control Plan
RAC	: Registered Asbestos Contractor
SHE	: Safety, Health and Environment
SOW	: Scope of Work
SAIOH	: Southern African Institute for Occupational Hygiene
SANS	: South African National Standards

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3. SPECIFICATIONS AND DESCRIPTION OF WORKS

3.1 General Requirements

The execution of asbestos demolition, removal, transportation and disposal activities shall comply with Eskom standard *Requirements for the Safe Processing, Handling, Storage, Disposal and Phase-out of Asbestos* (herein referred to as 32-303), *Asbestos Abatement Regulations per GNR 1196 of 2020* (herein referred to as AAR) and *Matimba Waste Management Procedure (PS/244/001)*. Revision 2 of 32-303 asbestos phaseout standard shall be applied. Thus, prior to commencement of asbestos dismantling activities, the appointed contractor shall, in line with the regulations, be responsible for the following:

- 1) Provide confirmation or proof of registration as registered asbestos contractor (RAC) in line with the AAR regulations,
- 2) Conduct a risk assessment and develop a plan of work (POW) in accordance with 32-303 and applicable national regulations,
- 3) Ensure that the POW includes emergency response plans subject to the risk assessment outcomes,
- 4) Ensure that the POW is accepted and signed by Eskom's appointed representative, appointed Approved Inspection Authority for Asbestos (AIA) and contractor's appointed representative,
- 5) Ensure that the approved POW is submitted to and accepted by Chief Director of Provincial Operations,
- 6) Ensure that all contractor's employees to be involved in the asbestos removal project are adequately informed, trained and competent to carry out their respective duties,
- 7) Ensure that training is provided in line with requirements of AAR. Moreover, training contemplated in sub-regulation (3) of AAR must be provided by (i) a person deemed competent by the chief inspector; (ii) have a minimum contact duration of eight hours; and (iii) as an outcome, provide employees with asbestos training certificates.
- 8) Appoint a occupational health and safety representative for the project,
- 9) Cooperate with the employer's representatives during ad hoc monitoring and inspection activities to be conducted by the employer's representatives per requirements described in this SOW (per section 3.4.13).
- 10) Ensure that asbestos-containing waste is managed per regulation 21 of the AAR and Matimba Waste Management Procedure PS/244/001.

3.2 Health and Safety

3.2.1 Health and Safety Assessments

The contractor shall be responsible for the following:

- 1) Creating and maintaining a Safety, Health and Environment (SHE) file for the project,
- 2) Arranging medicals for all contractor's employees,
- 3) Arranging health and safety inductions and relevant training for all contractor's employees,
- 4) Keeping and maintaining records of training and medical fitness certificates,
- 5) Ensuring safe work practices are followed by all contractor's employees throughout the project,
- 6) Maintaining safe work environment that cannot cause harm to the employees and public,
- 7) Ensuring compliance to the Occupational Health and Safety Act 85 of 1993.

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3.2.2 Personal Protective Equipment

The contractor shall be responsible for the following:

- 1) Providing personal protective equipment (PPE) including any special PPE required to all employees,
- 2) Ensuring all the PPE provided is SABS approved and compliant to both Eskom standards (32-303) and the AAR,
- 3) Ensuring all employees are trained and competent to use the PPE safely and in line with the relevant requirements.

3.2.3 Decontamination Facilities

Decontamination facilities need to be available and in close proximity to the areas which asbestos removal work is being performed. The SOW includes 143 asbestos houses located at different addresses as indicated in the attached list of houses. Thus, the contractor shall procure and provide suitable asbestos decontamination facilities which meet the following requirements:

- 1) Decontamination facilities must be mobile such that they can be moved with ease to the areas where required (or specifically to the addresses where asbestos dismantling and removal activities are imminent per project schedule),
- 2) Decontamination facilities must be suited for the decontamination procedures detailed in the approved risk assessments and POW,
- 3) Decontamination facilities shall comply with the requirements of 32-303 and AAR,
- 4) prior to commencement of asbestos dismantling and removal activities, the contractor shall confirm the availability and readiness of functional decontamination facilities which are compliant to the requirements detailed in this SOW and any other referenced documents,
- 5) The contractor shall ensure that employee awareness of requirements for correct, safe and compliant usage of the decontamination facilities is included in the training or inductions to be provided to the employees.

3.3 Coordination of House Vacancy and Demolition Work

Some of the houses included in this scope of demolition works remain occupied by Eskom employees, and some houses may still be occupied during execution of the demolition project. However, Eskom intends to complete the demolition of all asbestos houses included in this scope (including those currently occupied) by year 2028. Although it is unknown when each of the occupied houses may become vacant and available for demolition, it is expected that occupied houses will become vacant over time given that the demolition of asbestos houses is mandatory and must be completed within the specified deadline of asbestos phaseout per government's asbestos abatement requirements. Eskom is also working with employees who are currently occupying the asbestos houses to provide alternative accommodations so that occupied houses can be vacated to allow demolition work to be completed. Thus, the contractor shall prioritize and schedule the demolition work such that all houses that are vacant per list attached to this SOW document are demolished first. During the course of the project, the employer will timeously inform the contractor about changing vacancy status of houses currently occupied so that they can be included into the demolition activities when they become vacant.

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In the event that demolition of all vacant houses is completed, and remaining houses are all still occupied and cannot be vacated immediately, the following shall be applicable:

- 1) Subject to assessments and agreement with the employer, the contractor may de-establish from the project temporarily and await employer's instructions for contractor to re-establish and proceed with project once at least 10 houses (or as agreed with employer) have become vacant and ready for demolition.
- 2) The employer will coordinate vacation of remaining occupied houses with the project and provide necessary instructions to the contractor to proceed with execution of the demolition work based on agreed number of newly vacated houses which have become ready for demolition.
- 3) The contractor shall proceed with execution of demolition works on the houses that have become vacant upon receiving instructions from the employer. Additional houses which become vacant during demolition of recently vacated houses shall also be added and included in the on-going demolition works based on employer's further instructions.
- 4) If the demolition of all vacated houses (including newly vacated houses) is complete while there are still more houses to be demolished, further temporary de-establishment from project may be followed by contractor in line with requirements of this section. This may be repeated until demolition of all asbestos houses included in the list attached to this SOW is complete, at which point site de-establishment will be done permanently along with processes to close out the project.

3.4 Execution of Work

3.4.1 Notification of Asbestos Work

The contractor shall comply with AAR requirements for notifying the Chief Director of Provincial Operations about particular asbestos work activities. Thus, the contractor shall be required to do the following:

- 1) Notify Chief Director of Provincial Operations, in writing, about any type 1, type 2 or type 3 asbestos work, at least seven days prior to carrying out such work.
- 2) Report any spill, disturbance or uncontrolled release of asbestos during execution of asbestos work, which may be considered a health hazard, to the Chief Director of Provincial Operations by telephone, electronic mail or similar approved means of communication,
- 3) Inform the employer about the notifications and activities noted in this clause (3.4.1).

3.4.2 Site Establishment

- 1) The contractor shall be responsible for all aspects of site establishment. These shall include setting up all facilities required for the execution of all the scope in line with 32-303 standard, AAR and the approved POW.
- 2) The contractor shall ensure that the required facilities, tools, equipment, materials and any other items necessary to initiate and execute the work are timely available for intended use on the project to ensure that execution of all the work remains in line with the agreed schedule and cost constraints. This shall include acquisition, delivery to site, setting up and any other activities necessary to ensure availability and readiness of all resources needed for safe and complete execution of work.
- 3) Site establishment shall be in accordance with site preparation plan included in the overall POW.

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3.4.3 Site Isolation, Demarcation and Barricading

Prior to commencing work at any of the houses to be demolished, the contractor shall ensure that the asbestos work area is isolated and demarcated in line with AAR and 32-303 requirements. The contractor's responsibilities shall also include the following:

- 1) Providing clearly labelled signs and barricades to prevent public access into the regulated asbestos area.
- 2) Providing asbestos containment measures around the asbestos work area when there is a foreseeable risk of release of airborne asbestos fibres (i.e. subject to the risk assessment and POW). The containment measures must prevent any released asbestos fibres from spreading out (through wind or rainfall) of the demarcated and regulated asbestos area. During any release of asbestos fibres, the containment measures must also be sufficient to maintain the exposure levels below the occupational exposure limit (OEL) for asbestos as prescribed by the AAR.
- 3) Ensuring access to the demarcated asbestos area is controlled and strictly provided to authorized personnel for purpose of executing the work. Access control measures shall also consider access requirements for the Eskom representatives as may be necessary for conducting relevant site inspections and monitoring activities per section 3.4.13 of this SOW.
- 4) Ensuring personnel accessing the demarcated asbestos work-area comply with all relevant site requirements including wearing required PPE (and any other applicable requirements).

3.4.4 Retrieval of Air Conditioning Units

Eskom considers air conditioning units installed in the asbestos houses valuable and must be safely retrieved before or as part of demolition activities. The retrieval of air conditioning units in each house is to be done by the employer prior to commencement of demolition work by the contractor. Thus, prior to commencing any dismantling work at any asbestos house, the contractor shall be required to first verify that Eskom has removed the air conditioning units and if not, the contractor shall inform the employer's representative (Project Manager) to allow Eskom to remove the identified air conditioning units. Once removal of air conditioning units has been completed and/or verified, the contractor shall then proceed with asbestos dismantling and removal activities in line with this SOW and the POW.

3.4.5 Overview of Demolition Work and Exclusions

Each house address included in the list attached to this SOW includes a house and a garage fenced within one stand identifiable by the address and Erf number provided in the list. The demolition work within each house address shall include removal of all parts of the superstructures for the house and the garage. In particular, demolition of superstructures for each house and its garage shall include the following:

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- 1) Safe removal of asbestos panels (walls and ceiling).
- 2) Removal of doors, windows and vent louvers (including frames and burglar proofing).
- 3) Removal of the roof including roof cladding, roof cap, gutters, downpipes, trusses, purlins, and any other parts of the roof including services (e.g. geyser, pipes, cables, etc.) located above ceiling level.
- 4) Removal of steel frames and pillars which support the superstructures of the house and garage.
- 5) Removal of precast concrete walls including gates provided through the precast concrete walls.
- 6) Removal of items inside the house and garage including toilets, basins, sinks, bathtubs, cabinets (including bedroom cupboards), and overall electrical cabling and plumbing systems. *Main supply and distribution systems (i.e. electricity, water and sewage) shall be safely isolated and protected to ensure future availability to the stand after demolition of the asbestos house.*

Demolished asbestos and non-asbestos waste shall be handled, stored, transported and disposed per requirements detailed in this SOW within the sections to follow.

3.4.6 Exclusions

The following items shall be excluded from demolition work and shall remain in the best condition (as found prior to demolition) possible after demolition work is complete:

- 1) Air conditioning units. *At the start of demolition work in any house, air conditioning units shall be referred to employer for removal if not already removed.*
- 2) Substructures for garage and house which include concrete floor slabs, ramps, foundation, floor paving and concrete/paved walkways.
- 3) Main fence for each house.
- 4) Adjacent private garage connected to Eskom garage. *The private garage shall require modifications to seal remaining openings after demolition of connected Eskom garage. Requirements for modifications of private garages are detailed in section 3.4.8.*
- 5) Existing trees within or close to the stand where demolition work is to occur. *Should any existing tree prevent safe demolition work in any of the addresses listed in this SOW, the contractor shall be required to notify the employer and request further instructions.*
- 6) Underground services. *This excludes internal systems (i.e. electrical distribution wires and pipes) within the house and garage which shall be removed without damaging the main systems as indicated in section 3.4.5.*
- 7) Any other external services in vicinity of the house where demolition is to occur.

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3.4.7 Demolition, Handling and Temporary Storage of Asbestos and ACM Waste

The contractor shall be responsible for safe dismantling, removal, handling and on-site temporary storage of all asbestos material gathered during demolition and removal activities. These activities shall be done in accordance with Matimba Waste Management Procedure (PS/244/001), Eskom standard (32-303) and national regulations (AAR). The contractor shall also be responsible for ensuring the following requirements are met during execution of these activities:

- 1) Only skilled, competent and trained personnel shall be allowed to perform the work.
- 2) All asbestos demolition, handling and storage activities shall be executed in line with the approved POW.
- 3) The contractor shall measure and verify quantities on site prior to commencement of asbestos dismantling activities. Moreover, the contractor shall record and keep track of quantities of all asbestos and ACM removed during execution.
- 4) All asbestos and ACM collected as hazardous waste shall be placed in the double impermeable plastic bags (i.e. 250 micron thick plastic bags) for asbestos waste and sealed properly to prevent any asbestos fibre release. The waste storage containers or skips shall be provided by the contractor to be used on-site to store asbestos waste bags which are properly sealed and free from any leaks or openings.
- 5) All waste storage containers shall be clearly labelled and placed safely within the controlled work area until the waste is collected and transported to the designated hazardous waste site.
- 6) During the asbestos removal activities, air monitoring shall be done in line with section 3.4.11 of this document.
- 7) Any incidences encountered during demolition activities shall be addressed through emergency response plans provided by the POW in line with the risk assessments completed prior to execution.

The contractor shall also comply to particular regulatory requirements for registered asbestos contractors per AAR. These include the following:

- 1) In the case of type 2 asbestos work, the registered asbestos contractor must undertake only the type of asbestos work for which they are registered by the Chief Inspector;
- 2) Appoint an occupational health and safety representative as contemplated in section 17 of the Act;
- 3) Before commencement of any asbestos work and during such work, the registered asbestos contractor must ensure that a risk assessment is performed that includes (i) identification of the hazards to which persons may be exposed; (ii) an assessment of the risks related to the hazards based on a documented method; and (iii) documented control measures to mitigate the risks.

Demolition of asbestos houses will also result in the non-hazardous waste including steel materials, timber and any other materials which do not contain asbestos. The non-hazardous waste shall be handled per requirements of section 3.4.12 of this document.

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3.4.8 Garage Modifications for Adjacent Private Property

The list of houses as attached to this SOW indicates Eskom houses with garages connected to private properties' garages. The contractor shall be responsible for demolishing Eskom's garages without causing any damage to the adjacent private garages. Moreover, modifications shall be done on all the affected private garages to ensure that they all remain intact after demolishing Eskom's garages. Activities to be executed by the contractor shall include the following:

- 1) On the Eskom's garage, remove all asbestos panels, doors, windows, roof sheeting from the garage shelter without removing or affecting any structural elements including column/strut elements and the roof truss.
- 2) Separating the structural elements of Eskom's garage from the private garage structure. Common elements such as struts, wall panels and roof cap (all of which divide/separate the Eskom and private garages), shall be considered as part of the private garage structure and shelter and shall not be dismantled or damaged.
- 3) The steel truss and roof elements extending into the Eskom's garage shall be separated by cutting the Eskom garage's truss members as close to the middle common elements as possible. The modification details are to be per sketches attached to this SOW. It is expected that all the garages included in this SOW are identical and in line with similar design of roof trusses per drawings referenced in this SOW, however, should the contractor encounter any garage structures which are not in line with design details provided with this SOW, the contractor shall notify the Employer for assessment and confirmation of methods to demolish the Eskom's garage without affecting the connected private property's garage.
- 4) The remaining floor slab, ramp and foundation which extend into the Eskom's side shall not be demolished.
- 5) Once the structural elements have been separated, the remaining elements on the Eskom's side can be removed, transported, and disposed per requirements of this SOW.
- 6) The openings and gaps along the remaining common wall line on the remaining private garage shall be sealed in line with details attached to this SOW. A 9mm fibre cement board for exterior use with waterproof and fire resistance properties shall be used to close the openings on the wall above the ceiling level particularly in the area where bathrooms are located. Contractor shall provide a sample and material data sheet for Employer's approval before use of cement board.
- 7) The colour of the fibre cement board shall be consistent with colour of remaining asbestos wall panels on the private garage.
- 8) The contractor shall strictly take reasonable measures to ensure that the remaining structural elements, roof caps and wall panels along the remaining common wall are not damaged during execution of demolition work (on Eskom garage) and modification work (for remaining private garage).
- 9) The number of houses with timber roof trusses is limited, however, where the roof of private garage is made of timber trusses, the contractor shall follow the modification instructions and details per document F/290/007, attached to this SOW.
- 10) The contractor shall submit relevant quality plans and Quality Control Plans (QCP) which shall govern the inspections and monitoring of demolition and garage modification activities.
- 11) The contractor shall also comply with all requirements for working with asbestos as described in this SOW and POW as well as applicable regulations and standards.

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3.4.9 Transportation of Asbestos and ACM Waste

The contractor shall be responsible for the safe transportation of all asbestos waste to the designated hazardous waste disposal site. The contractor shall ensure that the transportation of asbestos waste adheres to the following:

- 1) Transportation is in accordance with the best practices to limit the risk of the potential exposure of people and the environment to asbestos fibres. Transportation of asbestos waste shall comply with requirements of AAR and 32-303.
- 2) Transportation of asbestos waste shall be in accordance with applicable parts of SANS 10228: 2012 and SANS 10229: 2010 (parts 1 & 2).
- 3) Transportation personnel shall be trained and certified competent to handle and transport asbestos waste.
- 4) Relevant PPE for transportation shall be provided (by the contractor) and used by all transportation personnel.
- 5) Vehicles used for transportation shall be classified and properly labelled.
- 6) Where necessary, the contractor shall ensure that relevant transport and traffic control departments are notified of the transportation activities and obtain relevant permits necessary for transportation of hazardous waste. The contractor shall keep records of such permits and timely avail them to the Employer when requested to do so.
- 7) Transportation of the asbestos waste shall not violate the AAR or any other applicable laws.

The contractor shall also be responsible for collection and transportation of non-hazardous waste per section 3.4.12.

3.4.10 Disposal of Asbestos and ACM Waste

The contractor shall be responsible for the safe disposal of all asbestos waste after transportation to the designated hazardous waste disposal site. The contractor shall ensure that the following are adhered to:

- 1) All persons involved in the disposal activities shall be trained and certified competent to carry out asbestos disposal activities.
- 2) All persons involved in asbestos disposal activities shall use relevant PPE per regulatory requirements.
- 3) Waste shall be deposited in such a manner to minimise dust or asbestos fibres dispersal. Possible disturbance of asbestos waste which may result in dust release or dispersal shall be prevented.
- 4) The permit requirements and conditions for each disposal site shall be adhered to.
- 5) Asbestos waste materials shall only be disposed of at sites specifically designated for such purpose.
- 6) Disposal shall comply with Eskom standard (32-303), AAR, Environment Conservation Act of 1989, and National Environmental Management Waste Act of 2008.
- 7) Details of the registered asbestos disposal site for the disposal activities shall be confirmed. The contractor shall confirm details of the disposal sites and further submit the permit or licence for use of the disposal sites to be used for disposal of asbestos waste and any other waste generated during dismantling of asbestos houses.

The contractor shall also be responsible for disposal of non-hazardous waste per section 3.4.12 of this document.

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3.4.11 Environmental Air Monitoring and Control

The air monitoring (including sampling and analysis) shall comply with AAR and 32-303 requirements. *Environmental air monitoring* includes static air monitoring for regulated fibres conducted downwind from outdoor type 2 asbestos work or outside asbestos enclosures where type 3 asbestos work is performed or in any area where there is the potential for asbestos contamination. During execution of works, the contractor shall take reasonable measures to prevent any release of airborne asbestos fibres and ensure that the asbestos exposure remains below the OEL for asbestos as stipulated by the AAR. In the case of type 2 asbestos work, air monitoring of the concentration of airborne regulated fibres to which an employee may be exposed, shall be performed by an approved inspection authority. Following the completion of type 2 asbestos work, an approved inspection authority must do the following:

- 1) Conduct a thorough visual inspection of the relevant asbestos work area,
- 2) Conduct air sampling to ensure compliance with the clearance indicator,
- 3) Ensure that all asbestos waste has been removed in accordance with requirements of regulation 21 of AAR, and
- 4) Issue a written declaration for the purpose of clearance certification.

3.4.12 Requirements for Non-Hazardous Waste

Dismantling of asbestos houses will also result in the non-hazardous waste including timber, steel materials (roof sheeting, gutters, downpipes, frames, truss members, doors, gates, etc.) and in some cases other materials. Any steel, timber or other non-hazardous waste materials shall be safely dismantled and collected for removal from site. The concrete floor slabs, foundations and walkways which formed part of the asbestos houses shall not be demolished. The fence for each house shall also not be removed. To ensure that non-hazardous waste is collected and disposed appropriately, the contractor shall be responsible for the following:

- 1) Dismantling, sorting and temporary storage of all non-hazardous waste,
- 2) Ensuring that all waste collected as non-hazardous waste is free from contamination before transportation to non-hazardous waste disposal site,
- 3) Treating contaminated waste which cannot be decontaminated with ease, as hazardous waste to be collected, temporarily stored, transported and disposed safely as per requirements for ACM discussed in previous sections of this SOW,
- 4) Transportation of non-hazardous waste to designated disposal site,
- 5) Disposal of non-hazardous waste at designated disposal site,
- 6) Obtaining and keeping records of relevant permits for transportation and disposal of non-hazardous waste.
- 7) Ensuring that non-hazardous waste is managed and disposed in line with Matimba Waste Management Procedure (PS/244/001).
- 8) Complying to National Environmental Management Waste Act of 2008 and other relevant waste management standards and regulations.

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3.4.13 Employer's Oversight and Inspection Activities

All activities to be executed by the contractor are to be monitored, inspected and signed-off by relevant authority (e.g. AIA, Chief Director of Provincial Operations, Occupational Health and Safety Officer, etc.) in line with POW and AAR. Moreover, the employer's representatives may conduct additional ad hoc monitoring and inspection activities throughout the life of the project and at a frequency deemed necessary by the employer to ensure that the employer's requirements (and all other requirements) are met.

Employer's representatives include:

Engineer: to monitor and confirm that the technical requirements of the SOW are met throughout the project,

Environmental officer: to monitor and confirm environmental compliance of the works, and

Health and Safety officer: to monitor and confirm compliance to occupational health and safety requirements.

Project Manager: to manage the overall project for the demolition of asbestos houses.

Other Representatives: any other persons who may be delegated by the employer or by any of the employer's representatives to fulfil any responsibilities for oversight and inspections on behalf of the employer.

Throughout the execution of the project, the contractor is required to provide access (to the work site) to the employer's representatives to allow the employer to conduct ad hoc monitoring and inspection activities as necessary to ensure that requirements of this SOW are met during execution of the project. This shall also include providing access to any relevant documents and records which the employer's representative may need to review or verify during the monitoring and inspection activities. The employer's representative shall comply with relevant work site requirements during such activities. This includes wearing correct PPE, complying to site access control requirements (i.e. signing relevant access registers, presenting identity and permits for verification, etc.) and any other applicable requirements.

The contractor shall generally include the inspection and monitoring activities in the Quality plans, QCPs and the overall POW.

3.4.14 Site Decontamination and Landscaping after Completion of Demolition Work

Upon completion of dismantling and removal of asbestos and all other waste, the contractor shall ensure that the site is properly cleaned, and natural ground levels (particularly where the house foundations and concrete floor slabs have been removed) are restored by re-levelling and alignment with the surrounding areas. In cases which asbestos fibres have been released, the exposure risks shall be confirmed by monitoring of OEL for asbestos per section 3.4.11, and decontamination of the site must be done where exposure risks are above regulatory OEL for asbestos or as instructed by the appointed AIA. Decontamination of site shall comply with requirements of AAR and 32-303.

The contractor shall generally include the inspection and monitoring activities in the Quality plans, QCPs and the overall POW.

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3.5 List of Drawings

The following drawings form part of this SOW document:

- 1) 0.58/56 : Matimba Power Station Temporary House Type 3SB
- 2) 0.58/422: Matimba Power Station House Type A
- 3) 0.58/425: Matimba Power Station House Type A
- 4) 0.58/423: Matimba Power Station House Type B
- 5) 0.58/426: Matimba Power Station House Type B
- 6) 0.58/424: Matimba Power Station House Type C
- 7) 0.58/850: Matimba Power Station House Type C

NOTE: This SOW document shall be accompanied by the above drawings.

3.6 List of Attachments

- 1) Attachment 1: List of Asbestos Houses.
- 2) Attachment 2A: Elevation Views of Modifications Required for Safe Demolition of Eskom Garages Connected to Private Properties.
- 3) Attachment 2B: Detail A for Roof Modifications of Private Garages.
- 4) Attachment 3: F/290/007 Instructions and Details for Modification of Private Garages Comprising Timber Trusses.

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4. ATTACHMENTS

Attachment 1: List of Asbestos Houses.

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house number	street name	ERF	Type	Occupancy	Garage type	Private address	Required Action
3	Sandsteen	4126	C	Occupied	Single	N/A	Demolish
5	Sandsteen	1568	C	Vacant	Single	N/A	Demolish
7	Sandsteen	1567	C	Vacant	Single	N/A	Demolish
23	Sandsteen	4064	C	Occupied	Private	25 Sandsteen	Demolish and modify private garage
29	Sandsteen	4061	C	Occupied	Private	27 Sandsteen	Demolish and modify private garage
31	Sandsteen	4060	C	Occupied	Private	33 Sandsteen	Demolish and modify private garage
41	Sandsteen	4055	A	Vacant	Private	43 Sandsteen	Demolish and modify private garage
1	Sandveld	4647	A	Vacant	Private	3 Sandveld	Demolish and modify private garage
28	Skadukant	4035	C	Occupied	Single	N/A	Demolish
30	Skadukant	4036	B	Vacant	Single	N/A	Demolish
3	Skurwerand	1564	C	Occupied	Single	N/A	Demolish
11	Skurwerand	4122	C	Vacant	Private	13 Skurwerand	Demolish and modify private garage
14	Skurwerand	4071	C	Occupied	Private	12 Skurwerand	Demolish and modify private garage
31	Skurwerand	4112	C	Occupied	Private	33 Skurwerand	Demolish and modify private garage
37	Skurwerand	4109	C	Occupied	Private	35 Skurwerand	Demolish and modify private garage
39	Skurwerand	4108	C	Occupied	Single	N/A	Demolish
43	Skurwerand	4106	C	Occupied	None (School)	N/A	Demolish
54	Skurwerand	4087	A	Occupied	Private	56 Skurwerand	Demolish and modify private garage
22	Snuifpeul	4468	C	Occupied	Single	N/A	Demolish
24	Snuifpeul	4469	C	Occupied	Single	N/A	Demolish
35	Snuifpeul	4660	C	Occupied	Single	N/A	Demolish
37	Snuifpeul	4659	C	Occupied	Single	N/A	Demolish

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house number	street name	ERF	Type	Occupancy	Garage type	Private address	Required Action
64	Snuifpeul	4489	C	Vacant	Eskom	N/A	Demolish
66	Snuifpeul	4490	B	Occupied	Eskom	N/A	Demolish
70	Snuifpeul	4492	A	Vacant	Private	68 Snuifpuil	Demolish and modify private garage
76	Snuifpeul	4495	C	Occupied	Eskom	N/A	Demolish
78	Snuifpeul	4496	C	Occupied	Eskom	N/A	Demolish
69	Springbok	4091	C	Occupied	None (School)	N/A	Demolish
1	Tsessebe	4586	C	Vacant	Private	3 Tsessebe	Demolish and modify private garage
5	Tsessebe	4584	C	Vacant	Private	7 Tsessebe	Demolish and modify private garage
6	Tsessebe	4605	C	Vacant	Private	8 Tsessebe	Demolish and modify private garage
10	Tsessebe	4607	C	Occupied	Private	12 Tsessebe	Demolish and modify private garage
13	Tsessebe	4580	C	Vacant	Eskom	N/A	Demolish
15	Tsessebe	4579	C	Occupied	Eskom	N/A	Demolish
18	Tsessebe	4611	C	Occupied	Private	20 Tsessebe	Demolish and modify private garage
24	Tsessebe	4614	C	Occupied	Single	N/A	Demolish
26	Tsessebe	4615	C	Vacant	Single	N/A	Demolish
38	Tsessebe	4621	C	Occupied	Single	N/A	Demolish
48	Tsessebe	4626	C	Occupied	Private	50 Tsessebe	Demolish and modify private garage
52	Tsessebe	4628	C	Occupied	Private	54 Tsessebe (School)	Demolish and modify private garage
55	Tsessebe	4568	C	Occupied	Private	53 Tsessebe	Demolish and modify private garage
36	Vaalbos	4514	C	Occupied	Single	N/A	Demolish

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house number	street name	ERF	Type	Occupancy	Garage type	Private address	Required Action
1	Valsdoring	4548	C	Occupied	Private	3 Valsdoring	Demolish and modify private garage
6	Valsdoring	4552	C	Vacant	Private	8 Valsdoring	Demolish and modify private garage
10	Valsdoring	4554	C	Occupied	Single	N/A	Demolish
14	Valsdoring	4555	C	Occupied	Single	N/A	Demolish
26	Valsdoring	4556	C	Vacant	Private	28 Valsdoring	Demolish and modify private garage
33	Valsdoring	4525	C	Vacant	Private	31 Valsdoring	Demolish and modify private garage
39	Valsdoring	4522	C	Occupied	Single	N/A	Demolish
45	Valsdoring	4546	C	Vacant	Single	N/A	Demolish
51	Valsdoring	4543	C	Vacant	Single	N/A	Demolish
7	Waaisand	4369	C	Occupied	Private	5 Waaisand	Demolish and modify private garage
15	Waaisand	4365	C	Vacant	Private	13 Waaisand	Demolish and modify private garage
16	Waaisand	4278	C	Vacant	Private	14 Waaisand	Demolish and modify private garage
17	Waaisand	4364	C	Occupied	Eskom	N/A	Demolish
19	Waaisand	4363	C	Occupied	Eskom	N/A	Demolish
21	Waaisand	4362	C	Vacant	Eskom	N/A	Demolish
23	Waaisand	4361	C	Occupied	Eskom	N/A	Demolish
12	Waterberg	4229	C	Vacant	Private	14 Waterberg	Demolish and modify private garage
13	Waterberg	4247	C	Vacant	Private	11 Waterberg	Demolish and modify private garage
15	Waterberg	4246	C	Vacant	Private	17 Waterberg	Demolish and modify private garage
18	Waterberg	4232	C	Vacant	Private	16 Waterberg	Demolish and modify private garage
21	Waterberg	4243	C	Occupied	Private	19 Waterberg	Demolish and modify private garage
23	Waterberg	4242	C	Occupied	Eskom	N/A	Demolish
25	Waterberg	4241	C	Occupied	Eskom	N/A	Demolish

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house number	street name	ERF	Type	Occupancy	Garage type	Private address	Required Action
26	Waterberg	4236	C	Occupied	Private	24 Waterberg	Demolish and modify private garage
30	Waterberg	4236	C	Vacant	Private	28 Waterberg	Demolish and modify private garage
2	Waterbessie	4128	C	Occupied	Eskom	N/A	Demolish
4	Waterbessie	4129	C	Occupied	Eskom	N/A	Demolish
5	Waterbessie	4224	C	Occupied	Private	7 Waterbessie	Demolish and modify private garage
9	Waterbessie	4222	C	Occupied	Private	11 Waterbessie	Demolish and modify private garage
14	Waterbessie	4134	C	Occupied	Private	12 Waterbessie	Demolish and modify private garage
15	Waterbessie	4219	C	Occupied	Private	13 Waterbessie	Demolish and modify private garage
18	Waterbessie	4136	C	Occupied	Private	20 Waterbessie	Demolish and modify private garage
19	Waterbessie	4217	C	Occupied	Eskom	N/A	Demolish
21	Waterbessie	4216	C	Vacant	Eskom	N/A	Demolish
34	Waterbessie	4144	C	Occupied	Single	N/A	Demolish
59	Waterbessie	4355	C	Vacant	Single	N/A	Demolish
61	Waterbessie	4354	C	Vacant	Single	N/A	Demolish
69	Waterbessie	4350	C	Vacant	Single	N/A	Demolish
72	Waterbessie	4163	C	Vacant	Single	N/A	Demolish
73	Waterbessie	4348	C	Vacant	Single	N/A	Demolish
78	Waterbessie	4166	C	Occupied	Single	N/A	Demolish
95	Waterbessie	4411	C	Vacant	Private	93 Waterbessie	Demolish and modify private garage
97	Waterbessie	4410	C	Occupied	Eskom	N/A	Demolish
99	Waterbessie	4409	C	Occupied	Eskom	N/A	Demolish
105	Waterbessie	4406	C	Occupied	Private	107 Waterbessie	Demolish and modify private garage
3	Waterbok	4550	C	Occupied	Single	N/A	Demolish

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house number	street name	ERF	Type	Occupancy	Garage type	Private address	Required Action
4	Waterbok	4186	C	Occupied	Single	N/A	Demolish
8	Waterbok	4188	C	Occupied	Single	N/A	Demolish
22	Waterbok	4443	C	Vacant	Single	N/A	Demolish
6	Waterlelie	4593	C	Vacant	Private	8 Waterlelie	Demolish and modify private garage
44	Waterlelie	4436	C	Occupied	Private	42 Waterlelie	Demolish and modify private garage
56	Waterlelie	4178	C	Occupied	Private	54 Waterlelie	Demolish and modify private garage
64	Waterlelie	4182	C	Occupied	Private	62 Waterlelie	Demolish and modify private garage
2	Waterpan	4252	C	Occupied	Single	N/A	Demolish
3	Waterpan	4203	C	Occupied	Private	1 Waterpan	Demolish and modify private garage
7	Waterpan	4201	C	Vacant	Private	5 Waterpan	Demolish and modify private garage
8	Waterpan	4205	C	Occupied	Single	N/A	Demolish
9	Waterpan	4200	C	Vacant	Private	11 Waterpan	Demolish and modify private garage
13	Waterpan	4198	C	Occupied	Single	N/A	Demolish
15	Waterpan	4197	C	Vacant	Single	N/A	Demolish
17	Waterpan	4196	C	Vacant	Single	N/A	Demolish
18	Waterpan	4207	C	Vacant	Single	N/A	Demolish
19	Waterpan	4195	C	Occupied	Single	N/A	Demolish
21	Waterpan	4194	C	Vacant	Single	N/A	Demolish
5	Wildebees	4290	C	Occupied	Single	N/A	Demolish
6	Wildebees	4336	C	Occupied	Single	N/A	Demolish
10	Wildebees	4338	C	Occupied	Single	N/A	Demolish
12	Wildebees	4339	C	Vacant	Single	N/A	Demolish

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house number	street name	ERF	Type	Occupancy	Garage type	Private address	Required Action
15	Wildebees	4359	C	Vacant	Single	N/A	Demolish
3	Wildesering	4285	C	Occupied	Single	N/A	Demolish
4	Wildesering	4280	C	Vacant	Single	N/A	Demolish
5	Wildesering	4284	C	Occupied	Single	N/A	Demolish
9	Wildesering	4282	C	Occupied	Private	8 Wildesering	Demolish and modify private garage
7	Wildevy	4397	C	Vacant	Private	5 Wildevy	Demolish and modify private garage
10	Wildevy	4377	C	Vacant	Eskom	N/A	Demolish
12	Wildevy	4378	C	Occupied	Eskom	N/A	Demolish
14	Wildevy	4379	C	Occupied	Private	16 Wildevy	Demolish and modify private garage
15	Wildevy	4393	C	Occupied	Private	13 Wildevy	Demolish and modify private garage
21	Wildevy	4390	C	Occupied	Private	23 Wildevy	Demolish and modify private garage
22	Wildevy	4383	C	Occupied	Eskom	N/A	Demolish
24	Wildevy	4384	C	Vacant	Eskom	N/A	Demolish
26	Wildevy	4385	C	Occupied	Private	28 Wildevy	Demolish and modify private garage
7	Witdoring	4261	C	Vacant	Single	N/A	Demolish
9	Witdoring	4260	C	Vacant	Private	11 Witdoring	Demolish and modify private garage
10	Witdoring	4211	C	Vacant	Private	8 Witdoring	Demolish and modify private garage
13	Witkrans	4455	C	Vacant	Single	N/A	Demolish
15	Witkrans	4454	C	Occupied	Single	N/A	Demolish
8	Worsboom	4314	C	Vacant	Private	6 Woorsboom	Demolish and modify private garage
12	Worsboom	4316	C	Occupied	Private	10 Woorsboom	Demolish and modify private garage
14	Worsboom	4317	C	Occupied	Eskom	N/A	Demolish

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house number	street name	ERF	Type	Occupancy	Garage type	Private address	Required Action
15	Worsboom	4303	C	Vacant	Private	13 Woorsboom	Demolish and modify private garage
16	Worsboom	4318	C	Occupied	Eskom	N/A	Demolish
17	Worsboom	4302	C	Occupied	Eskom	N/A	Demolish
19	Worsboom	4301	C	Occupied	Eskom	N/A	Demolish
22	Worsboom	4321	C	Occupied	Single	N/A	Demolish
28	Worsboom	4324	C	Occupied	Private	20 Woorsboom	Demolish and modify private garage
29	Worsboom	4296	C	Vacant	Eskom	N/A	Demolish
31	Worsboom	4295	C	Vacant	Eskom	N/A	Demolish
33	Worsboom	4294	C	Previous SoW	Disposed	35 Woorsboom	Modify private garage. Eskom house and garage already demolished.
36	Worsboom	4328	C	Occupied	Private	34 Woorsboom	Demolish and modify private garage
44	Worsboom	4332	C	Vacant	Private	42 Woorsboom	Demolish and modify private garage

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Attachment 2A: Elevation Views of Modifications Required for Safe Demolition of Eskom Garages Connected to Private Properties.

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Attachment 2B: Detail A for Roof Modifications of Private Garages.

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Attachment 3: F/290/007 Instructions and Details for Modification of Private Garages Comprising Timber Trusses.

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1. Executive overview

During demolition of 63 Snuifpeul property, it was noted that the garage is connected to the adjacent property's garage (65 Snuifpeul's garage) such that the frame structure (columns and roof trusses) of the two connected garages were built as one structure. The adjacent property (65 Snuifpeul) is a private property which does not belong to Eskom and is not included in the scope of demolition of Eskom's asbestos houses. Therefore, the neighbour's garage connected to the Eskom property's garage (63 Snuifpeul's garage) must not be demolished. Moreover, this has been found to be the case for other Eskom properties planned to be demolished in future. The structural frame of the two connected garages (Eskom and private property garages) must be modified such that the garage in Eskom's property can be demolished while keeping the private garage structurally intact and without damaging other parts of the garage. This scope of work outlines required modifications to keep the private garage intact.

2. Scope of work

The proposed sequence of works shall include: (1) additional truss members, (2) new longitudinal timber element at the top of the roof structure, (3) cutting the bullnose extension for good interface with new installations, (4) new IBR cladding on the side, (5) IBR to flat flashing interfaces for the roof sheeting and new IBR sheeting on the side, (6) flashing at the top to complete the closure. The removal of asbestos panels in the Eskom garage can be done prior to roof modifications, however the load bearing elements (columns and timber truss elements) must remain in place and only be removed after additional timber elements have been added to ensure the private garage structure remains intact and safe. Removal of the remaining structural elements in the Eskom garage can proceed after additional structural elements have been installed. Installation of additional structural timber elements must be safely coordinated with dismantling of Eskom garage to ensure the remaining structure (private garage) remains structurally intact. These activities are detailed in the following sections:

2.1. Installation of Additional Timber Elements

1. Additional vertical truss members must be added to the centre of all the trusses.
2. The additional timber truss members shall be sized (in terms of length) on site to suit the dimensions of the truss. Section size of member shall be same as the size of existing members.
3. Connection detail of additional timber members shall be same as connection used on the existing truss members.
4. New timber element must be installed at the top along the total length of the roof. This must be connected to all trusses.
5. All visible timber members must be treated with a wood preservative. Powafix Creosote or similar product may be used.
6. Installation of additional structural timber elements must be safely coordinated with dismantling of Eskom garage to ensure the remaining structure (private garage) remains structurally intact. If possible, install all additional timber elements before demolition of roof extending to Eskom's garage.

2.2. Installation of New IBR Cladding, Closures and Flashing

1. Before installations of the closures, the extended bullnose at the ridge (roof cap) must be cut as indicated on attached sketches such that the new IBR sheeting and flashing installations can flush and interface properly.
2. Additional IBR cladding must be installed to cover the exposed/compromised parts on the side from bottom level of the truss to the top.
3. A full and watertight closure at the top requires use of IBR closures for both the existing roof sheeting and the new IBR sheeting to be installed on the side. Thus, IBR closure compatible with the existing roof sheeting must be installed at the top to create a flat interface at the top side, while another IBR closure compatible with the new IBR cladding on the side must be installed on the new IBR cladding to create a flat surface side.
4. The roof and side closures must be completed by installing the flashing at the top to connect and closure the roof with a complete watertight flashing system.
5. The IBR cladding and closure systems must be installed to provide a proper and watertight closure along the full length of the roof.
6. The IBR cladding and closure systems must be adequately anchored on to the timber members.

7. Unless otherwise required by supplier of IBR cladding and closure systems, Tek screws may be used to fasten the IBR cladding to the truss members.
8. The sizing of cladding panels and closure systems must be measured on site so that the cladding and flashing can be cut to suit the required installation to provide full cover.
9. The cladding and flashing must be galvanized.

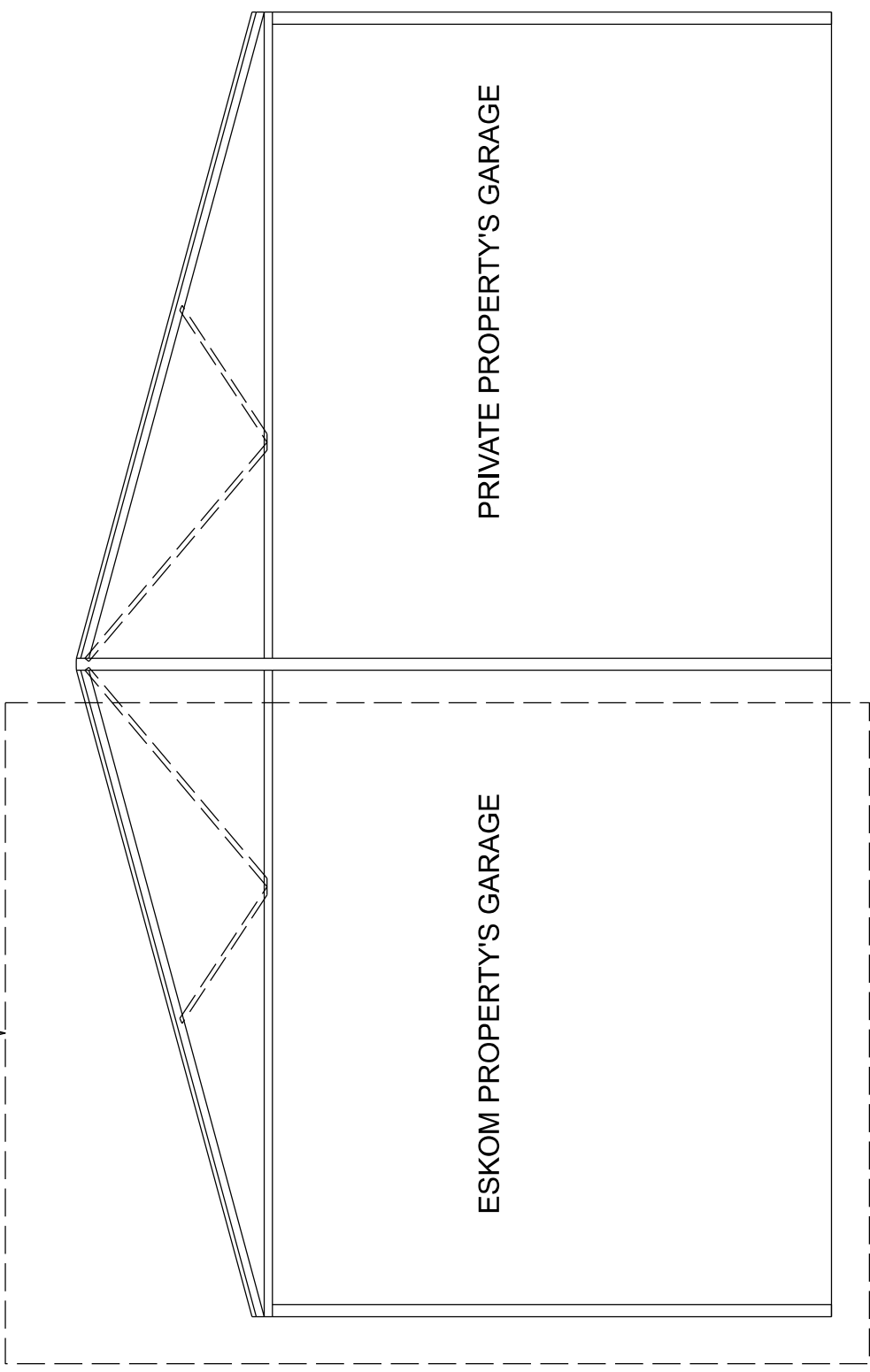
3. Other Requirements

The original scope of works for dismantling Eskom's asbestos houses remains applicable. Healthy, Safety and Environmental requirements and regulations for working with asbestos also remain applicable to the execution of modifications to be done per this scope of work.

4. Drawings

Refer to attached details.

Eskom Garage to
be dismantled

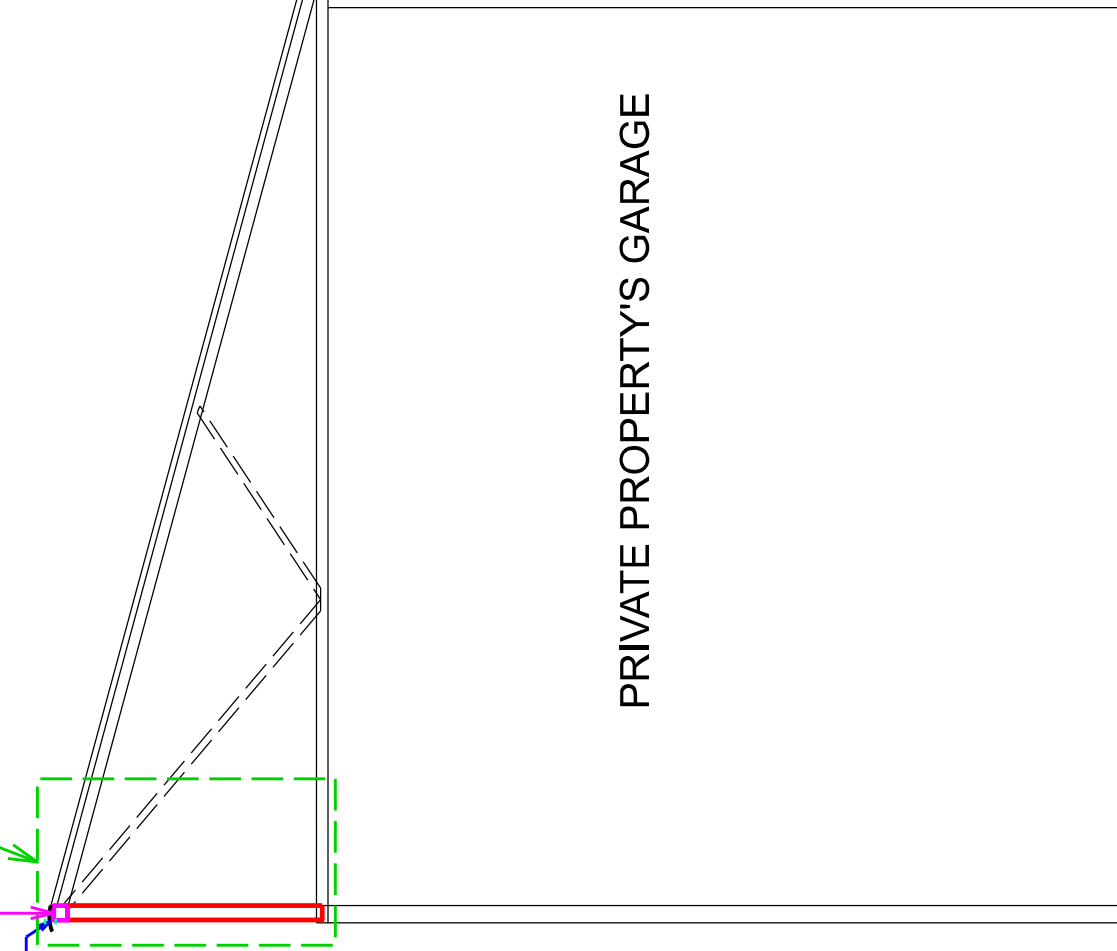


Eskom and Private Property Garages

Install new timber element along the full length of roof cap.

Cut bullnose extension roughly at this point where it intersects the blue line, and along its full length so that its end is covered by new flashing and IBR sheeting which must properly flush with all elements including truss elements, the cut bullnose and overall existing roof sheeting.

See Detail A

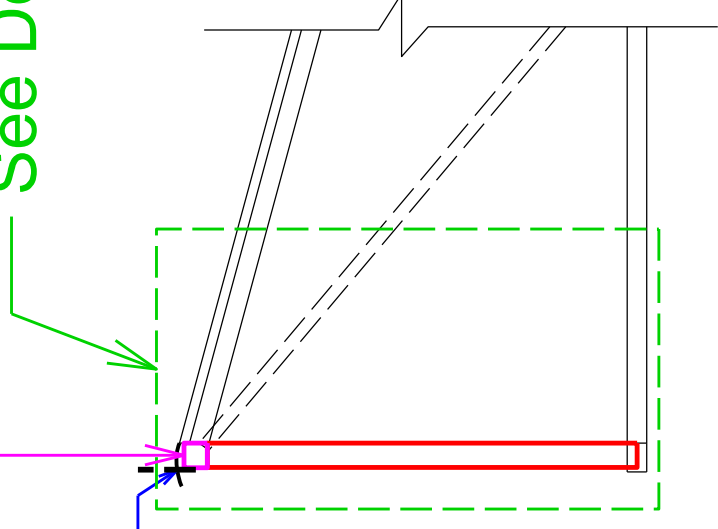


Private Property Garage

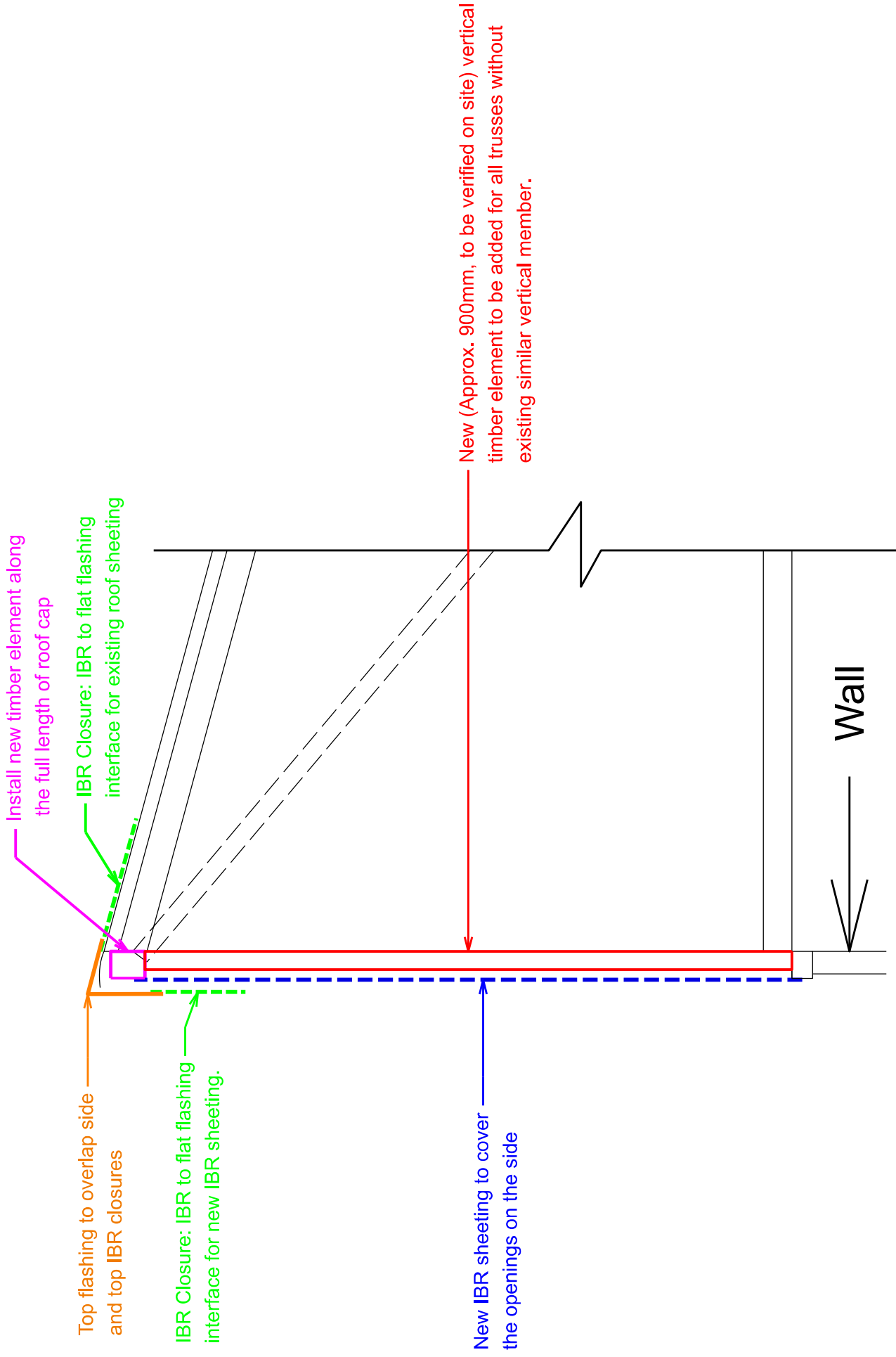
Install new timber element along the full length of roof cap.

Cut bullnose extension roughly at this point where it intersects the dashed line, and along its full length so that its end is covered by new flashing and IBR sheeting which must properly flush with all elements including truss elements, the cut bullnose and overall existing roof sheeting.

See Detail A



Private Garage Roof Modification



Detail A

NOTES:

1. Timber elements to be treated with Powafix Creosote or similar wood preservative.
2. Connection of timber elements to be similar to existing connections.
3. IFR sheeting and flashings to be anchored or connected using fixtures approved by supplier of the products.
4. IFR sheeting, closures, flashings and fixtures to be galvanized.
5. Roof and side closure installations must cover the full length of the roof (approximately 10 meters).