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**Health & Safety Plan**

## **1. Health & Safety Plan**

### **1.1 Introduction**

This document describes Vertical Limits approach to addressing the health and safety aspects for GSM work

### **1.2 Objective**

- 1.2.1 To ensure that Vertical Limits and its clients, principle contractors and contractors comply with the Occupational Health & Safety Act of 1993, Construction Regulations, 2003 and all its associated referrals
- 1.2.2 To create and maintain a safe and healthy working environment for all employees and visitors present on Vertical Limits and its clients and/or principle contractors premises and construction sites
- 1.2.3 To minimize the incidence of personal injuries to personnel and visitors to Vertical Limits and its clients and/or principle contractors premises and construction sites
- 1.2.4 To improve productivity and reduce costs by reducing accidents and injuries to persons, thereby eliminating downtime
- 1.2.5 To instill confidence within our customer base that in achieving the above objectives, they are dealing with a competent supplier of professional factory and field labour orientated services.

### **1.3 Services Rendered (a) & Competency (b)**

Vertical Limits is contracted by various clients to provide products and labour intensive services to supply reticulated containers or into or into purpose build equipment rooms as well as the reticulation of RF feeder and antenna systems including microwave equipment.

These services are further described as follows:

#### **1.3.1 Container Reticulation**

- a) The container supply and reticulation, comprises the supply and reticulation of equipment containers to the customer's specification. This is done at a purpose equipped factory premises and in a controlled environment by personnel competent to do the required work. A qualified person who on completion of his inspection supplies an electrical certificate, certifying that the reticulation conforms to the prevailing electrical regulations.
- b) All factory operation supervisors are trained and certified in fire fighting and first-aid

### **1.3.2 Equipment Installation**

- a) Equipment installation includes the mounting of contractor supplied equipment racks, wiring of all DC power and signal cabling and terminating thereof, both in the factory and field environments, including upgrading involving rack swaps in the field. Experienced personnel, who are certified by Vertical Limits to do this work, are fully conversant in the transporting, handling and installation of the equipment and are all equipped with the necessary tools and equipment, including Personal Protection Equipment to execute the installations in a safe manner so as to ensure the safety of the installation personnel, the environment and the installation.
- b) All field supervisors (team leaders) and at least one of the team members are trained and certified in fire fighting and first-aid.

### **1.3.3 RF Reticulation**

- a) RF reticulations are done at specific locations and comprise of the following:
  - i) The hauling of RF feeder cable and the termination thereof;
  - ii) The installation of RF Antennae and antennae steel mounting brackets;
  - iii) The installation of mast head RF amplifiers;
  - iv) The installation of cable trays and gantry; and
  - v) The installation of feeder earth-kits and all associated connectors and sealing kits.

Vertical Limits personnel are fully conversant in the transporting, handling and installation of the RF reticulation equipment and are all equipped with the necessary tools and equipment, including Personal Protection Equipment to execute the installations in a safe manner so as to ensure the safety of the

installation personnel, the environment and the installation.

b) These installations are done on various Client approved building rooftops and on towers ranging from 24m – 120m in height and as work is primarily done in elevated positions, Vertical Limits supplies personnel who are qualified to do this type of work and are trained and certified in the following:

- i) Level One Rope Access;
- ii) Level Two Rope Access;
- iii) Fall Arrestor.

As required by the relevant training associations, all personnel trained and certified are declared physically & psychologically fit by a Medical Practitioner, appointed by the relevant training associations.

Furthermore, all field supervisors (team leaders) and at least one of the team members are trained and certified in fire fighting and first-aid.

#### **1.4 Approach and appointments**

To prevent health and safety hazards from occurring on Vertical Limits premises and on construction sites, Vertical Limits ensures that:

- a) All personnel receive the necessary training in their related fields;
- b) All personnel are equipped with Personal Protective Equipment, including, but not limited to First-Aid kits, hard hats, safety shoes, protective eyewear, protective clothing, fall protection equipment, etc and that such is maintained in a good condition;
- c) All personnel are equipped with the necessary tools and that such are maintained in a good condition;
- d) A Supervisor is appointed in writing, who is responsible for all the health and safety aspects within his appointed area;
- e) A “Health and Safety Site File”, which includes a risk assessment, safe procedures to follow, registers and checklists, is issued to the appointed supervisor, who shall ensure that this file is kept on site in order for all personnel to do the allocated tasks in a safe manner and for reference purposes; and
- f) The risk assessment is maintained and amended where and when necessary to ensure that where new unusual risks and hazards are identified, that such is incorporated in the risk assessment.

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**Risk Assessment**

**2. RISK ASSESSMENT (For Equipment Installation and RF Reticulation Only)**

The Risk Assessment is divided into the following sections:

- a) **Identified Risks** – Lists all the risks to which persons may be exposed to;
- b) **Risk Grading** – Lists a numeric value to the risk and is derived from the following:

- 5 91 – 100% Grading Has been recorded frequently and may be expected
- 4 75 – 90% Grading Will/may occur several times
- 3 61 – 74% Grading May occur sometime
- 2 51 – 60% Grading Unlikely, though may occur
- 1 40 – 50% Grading Very unlikely

- c) **Hazards** – Lists the hazards that may result from the risks to which persons may be exposed to;
- d) **Causes** – Lists the possible causes from which the risks may be derived;
- e) **Preventative/Control Measures** – Lists the measures to be used and followed to mitigate, reduce and control the risks and hazards to which person may be exposed to;

ITEM	IDENTIFIED RISKS	CAT.	HAZARDS	CAUSES	CONTROL MEASURES
2.2.1	HIJACKING		? Serious Injury or death to driver and/or passengers	? Using travelling routes in areas with high crime rates; ? Performing work in areas with high crime rates.	? Use alternative routes with lower crime rates; ? Driver and passengers to be observant and vigilant at all times even whilst working on site.
2.2.2	MOTOR VEHICLE ACCIDENT		? Serious injury or death to driver and/or passengers	? Driver not in possession of valid driver's license for driven vehicle; ? Driver under the influence	? All drivers to provide driver's licenses to HR Officer for copying and filing; ? Attending work under the

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				of alcohol or narcotic drugs.	influence of alcohol or narcotic drugs, warrants an immediate dismissal.
2.2.3	MOTOR VEHICLE FAILURE		? Motor Vehicle Accident which may lead to serious injury or death to driver or passengers	? Motor vehicle not maintained in good order; ? Motor vehicle not maintained and serviced as per Manufacturer's Specifications	? Appoint a Motor Vehicle Inspector; ? Motor Vehicle Inspector to inspect motor vehicles on a daily basis, prior to use, using the "Motor Vehicle Inspection Checklist" ? Motor Vehicle to be serviced at Manufacturer's prescribed service intervals and at authorized dealers, specialising in that specific motor vehicle.
2.2.4	INJURY TO PUBLIC		? Serious injury or death to public	? Access to site not controlled, thereby permitting persons onto site who may not be aware of the dangers involved in the work; ? Site not demarcated/or signs of danger not visible.	? Appoint a Site Access Controller; ? Site Access Controller to control vehicles and pedestrians entering site; ? Site Access Controller to demarcate site with danger tape in the event that the site is not barricaded by a fence or wall; ? Where work takes place in an elevated position, Danger

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					“Men Working Above” signs to be posted in “No Go Zone” areas.
2.2.5	ILLEGAL OR THIRD PARTY INTRUSION		? Damage to equipment which may result in falling, leading to	? Inadequate security measures; ? “No Go Zone” not clearly Visible;	? Site Supervisors to keep all equipment stored in a locked store when not used; ? Site Access Controller to
			serious injuries or death	? Equipment left unattended.	control vehicles and pedestrians entering and leaving site; ? Site Access controller to demarcate site with checkered tape in the event that the site is not barricaded by fence or wall.
2.2.6	COLLAPSE OF BUILDING OR ANY PART OF STRUCTURE		? Serious injury or death due to falling of persons or material	? Inadequate or incorrect anchorage of parapet walls or roofing structure; ? Overloading roofing structure with personnel or the incorrect use of pulley systems; ? Failure of building structure ? Failure of Rope Access Equipment anchorages;	? Site Supervisor to assess the structural integrity of the building, parapet walls and roof prior to commencing work; ? Site Supervisor to select suitable anchorages for rope access equipment that are strong enough for the loads that will be placed upon them; ? Written

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					confirmation from the building landlord/owner that the building/structure is in a sound condition.
2.2.7	TECHNICIANS FALLING FROM HEIGHT		? Serious injury or death	? Untrained Technicians; ? Inadequate supervision of technicians; ? Equipment failure; ? Incorrect Personal Protective Equipment used; ? Negligence on the part of individual technicians; ? Failure of anchorages.	? All Technicians to be trained and certified in the correct use of safety equipment, fall arrest techniques and industrial rope access techniques; ? The appointed Site Supervisor is to be present at all times, especially when technicians are working in elevated positions; ? All Personal Protective Equipment to be inspected by

					the appointed Health & Safety Officer, prior to being released to site and upon return, using the Personal Protective Equipment Inspection Checklist; ? Site Supervisor to check that only Personal Protective Equipment issued by the Health & Safety Officer is used by himself and
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					the technicians.
2.2.8	BAD WEATHER CONDITIONS		Serious injury or death to person working on towers.	? Performing work during rain or on wet towers; ? Performing work during lightning storms;	? The appointed Site Supervisor shall check that the tower is dry upon doing pre-work inspections; ? The appointed Site Supervisor shall not permit work to commence during a lightning storm or rain; ? Once the lightning storm or rain has subsided, the Site Supervisor shall check that the tower is sufficiently dry for work to commence.
2.2.9	FALLING EQUIPMENT, TOOLS OR OBJECTS		Serious injury or death to personnel, other contractors or the public	? Aerial Installation Technicians or other site workers, dropping equipment, tools or other loose items from an elevated position	? Area of "No Go Zone" to be demarcated with danger tape and a danger "Men Working Above" sign to be posted in such a way that it is clearly visible; ? All aerial Installation technicians to secure all tools and loose items using tool pouches;

					? All persons on site to wear safety hard hats with chin straps; ? If an item is dropped, always shout "HEADS" ? Equipment
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				weighing more than 8kg to be raised and lowered on a separate system of Rigging Ropes and Anchors
2.2.10	FAILURE OF RIGGING ROPE AND ASSOCIATED EQUIPMENT	Serious injury or death to persons	? Rigging rope is knotted, kinked and/or strained; ? Rigging rope is corroded, degraded or damaged; ? Misuse/incorrect use of equipment	? All Rigging Rope and associated equipment are to be inspected by the Health & Safety Officer prior to being released to site and upon return. Results of these inspections are to be recorded in the "Rigging Equipment Register; ? Rope protectors are to be used to avoid abrasion; ? Rigging rope is to be treaded up tower following a route which is clear of obstructions, sharp appendages and in such a manner that when placed under strain, it does not chafe or rub against existing structures; ? Rigging rope is to be coiled up for transport in such a

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				<p>manner, that no part of the rope is knotted, kinked and/or strained;                  ? Rigging rope must be loaded</p>
				<p>for transport in the motor vehicle and stored in a location where it is not in contact with compound chemicals that shall corrode or degrade the rope and where it is clear of objects that can damage the fibre</p>
2.2.11	INJURY DURING RIGGING/HAULING ACTIVITIES	Minor/Serious injury or death due to persons/equipment falling from height.	<p>? Equipment falling due to snatch block &amp; chain not secured to tower/mast;                  ? Rigging rope snapping/tearing due to chaffing or rubbing against obstructions, sharp appendages or against existing structures, especially when strained;                  ? Aerial Installation Technicians falling due to not being secured by means of lanyards, whilst hauling antennas, etc.                  ? Antennas and brackets</p>	<p>? The snatch block and securing chain to be secured at the highest practical and safe point to a permanent member of the tower/mast;                  ? The rigging rope must be treaded up the tower following a route which is clear of obstructions, sharp appendages and in such a manner that when placed under strain, it does not chafe or rub against existing structures;                  ? Prior to</p>

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			<p>not tied securely to rigging rope;          ? Equipment falling due to bottom end of rigging rope not secured;          ? Equipment falling due to slippage whilst installing antennae and brackets;          ? Injury to hands whilst hauling of antennae</p>	<p>hauling, the Aerial Installation Technicians must secure themselves by means of both lanyards in the vicinity of where the antennae are to be secured;          ? Antennae and brackets shall be tied to the lead head of the rigging rope by means of a double reefed round turn and two half hitches to facilitate ease of untying the rope once the antennae are securely</p>
			<p>assemblies, resulting in release of rigging rope, therefore leading to equipment falling.</p>	<p>attached;          ? Once the antennae assemblies arrive at the level where they are to be secured, the Aerial Installation Technicians shall signal the ground crew to stop and the bottom end of the rigging rope must be secured;          ? The lead tail of the rigging rope shall only be untied, once the nuts and bolts of the antennae assemblies have</p>

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				been properly tightened; ? All Technicians performing rigging/hauling activities are to wear working gloves
2.2.12	CONFINED SPACES/ENCLOSED SPACES – LACK OF LIGHT	Serious injury or death to persons	? Technician becoming stuck due to excessive body size; ? Technician fainting due to lack of ventilation or excessive heat; ? Lighting not provided/maintained in structure by the owner of the site; ? Electrical power failure.	? Experienced Technicians to be selected according to body size suitable for the area of work; ? Work operations to commence early in the day to avoid excessive heat build-up inside tower; ? Once hatch is opened, allow 5 minutes standing time to allow ventilation into the tower; ? Top and bottom hatches to remain open during work operations; ? Fall Arrest Equipment to be used whilst climbing tower; ? A head torch shall be
				supplied as a Personal Protective Equipment item to be used whilst climbing/working in tower; ? Adequate refreshments to

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				be supplied on site and mandatory rest periods enforced.
2.2.13	USE OF POWER TOOLS	<p>? Minor/serious injury or death due to electrocution;</p> <p>? Minor/serious injury due to loss of control of tools</p> <p>? Damage to Rope Access Equipment due to loss of control of tools which may lead to serious injury or death</p>	<p>? Tools/extension cables incorrectly/poorly wired;</p> <p>? Damage to wires of tools/extension cables due to contact with rough edges;</p> <p>? Technicians not trained in the use of tools;</p> <p>? Technicians not exercising sufficient care whilst using tools;</p> <p>? Poor quality/condition of tool attachments like drill bits, grinding blades which may lead to breakages or loss of control of tools;</p>	<p>? All powered tools shall be inspected and certified by an certified Electrician, 3 monthly;</p> <p>? All powered tools shall be inspected by the Health &amp; Safety Officer , prior to be released to site and upon return. All the results of this inspection are to be recorded in the "Powered Tools Inspection Register";</p> <p>? Technicians to be suitably trained in the use of tools;</p> <p>? Site Supervisor to closely supervise all powered tool operations and to ensure that tools are used for the purpose for which they are supplied;</p> <p>? Tools to be used for the purpose for which they are supplied;</p> <p>? The use of Personal Protective Equipment appropriate to</p>

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					the type of tool being used shall be worn, including overalls, safety
					goggles, gloves, etc. ? Rigging of Technicians ropes shall be done in a manner to ensure that they can not be damaged through uncontrolled movement of tools.

<b>2.3 RISK ASSESSMENT SUMMARY CHECKLIST</b>			
<b>SITE DETAILS</b>			
SITE NAME			
SITE ID			
CLIENT			
PRINCIPLE CONTRACTOR			
CONTRACTOR			
PROJECT/TASK			
OTHER CONTRACTORS			
<b>IDENTIFIED RISKS</b>			
For causes and preventative/control measures, use Risk Assessment as reference.			
<b>No.</b>			
ITEM No	RISK	COMMENTS	RISKGRADING
2.3.1	Hi-jacking – Site en-route or in a high crime area		
2.3.2	Public – Site situated in a public place		
2.3.3	Weather Conditions		
2.3.4	Structure ,i.e. Monopole, lattice or building		
2.3.5	Collapse of Building/Structure		
2.3.6	Site Access		
2.3.7	Work performed in an elevated position		
2.3.8	Work performed in an enclosed/confined space		
2.3.9	Power Tools used to perform certain activities		
2.3.10	Others (Specify):		
<b>COMPLETED BY:</b>			
SITE SUPERVISOR'S NAME	SIGNATURE	DATE	

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**Methods & Procedures**

**3. METHODS & PROCEDURES****3.1 PRE-SITE ESTABLISHMENT**

It is vitally important that the following activities are performed before leaving for site as to prevent the Site Supervisor (possession of valid driver's license) from leaving the site and the Installation Technicians, unsupervised, to either collect forgotten items from base or to replace malfunctioning equipment.

**3.1.1 MOTOR VEHICLES**

The Site Supervisor, also appointed as the Motor Vehicle Inspector shall inspect the motor vehicle used to drive to site, using the "Motor Vehicle Inspection Checklist".

**3.2.2 EQUIPMENT**

a) Issued by the Health & Safety Officer, the following equipment is required to carry out hauling/rigging activities:

- Snatch block and securing chain
- Rigging Rope

b) Issued by the Health & Safety Officer, the following Electrically Powered Tools is required to carry out certain job specific activities:

- Drilling Machine
- Small Angle Grinder
- Small Jigsaw

c) Remaining the responsibility of the Site Supervisor, the following is the minimum equipment required to carry out RF job related activities:

- Spanners
- Side-cutters
- Stanley Knife
- Hacksaw and hand jig-saw
- RF Connectorization special preparation tools
- Screw drivers

d) Remaining the responsibility of the Site Supervisor who has been trained and certified in First-Aid and Fire Fighting, the following equipment is required to assist first-aiding and/or fire fighting:

- A fully equipped First-Aid Kit
- A Fire Extinguisher

**3.2.3 PERSONNEL QUALIFICATION REQUIREMENTS**

When selecting his team members, the Site Supervisor shall ensure that his team consists at a minimum; the following trained and certified personnel:

- At least two trained and certified First-Aid trained Installation Technicians, including himself;
- In the case of elevated work where rope access is required, at least two trained and certified Rope Access and Fall Arrest operatives;
- Installation Technicians which are suitably trained and experienced to carry out the work required and where Installation Technicians are being trained, such must be done under the supervision of the Site Supervisor.

**3.2.4 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

The Site Supervisor shall, by the use of the “Personal Protective Equipment Request Form”, request the following Personal Protective Equipment required to be worn as a minimum:

- Safety hard hats with chinstraps;
- Eye protection (suitable safety glasses) – when using grinder or where otherwise necessary;
- Suitable work gloves for protection of hands especially when rigging/hauling equipment;
- Personal rope access/fall arrest operative’s kit per trained and certified operative, when necessary.

The Health & Safety Officer shall ensure that the above Personal Protective Equipment is issued to the Site Supervisor by use of the “Personal Protective Issue Form” and shall also ensure that the following Personal Protective Equipment is purchased by our Buying Department and issued to all personnel in the month of January every year:

- Protective Clothing (overalls) – two sets per employee; and
- Safety boots with steel toe cap.

It shall remain the responsibility of the personnel to maintain his/her Protective Clothing and Safety Boots and shall be checked by the Site Supervisor, on a weekly basis. In the event that the Site Supervisor finds that the Protective Clothing and/or Safety Boots are not suitable due to damage, such Protective Clothing and/or Safety Boots are to be replaced by request from the Site Supervisor, using the “Personal Protective Equipment Request Form”.

**3.2 INSTALLATION METHOD****3.2.1 SITE PREPARATION**

## a) Permission

Prior to commencing required work, the Site Supervisor will obtain the appropriate work permission from the Client by the issue of Access cards and keys.

## b) Contractors

In the case where there are other contractors working on site (especially if they are working at elevated heights), the Vertical Limits appointed Site Supervisor shall assess the associated risks. If he deems that the conditions are unsafe, he shall liaise with the other contractor's Site Supervisor (team leader) and together they shall agree on the appropriate methodology conducive to a safe working environment, i.e. not having persons working on a tower while there are others that are working on the ground.

## c) Site Access Control

The Site Access Controller shall upon arriving on site, assess the areas to be demarcated and demarcate "No Go Zone" areas with barrier/danger tape, cones and appropriate warning signs. Where work is required in an elevated position, he shall demarcate the area below the elevated area and place a "Men Working Above" sign this area in such a manner that it is visible to other contractors on the site and to the public. Where work is required at floor/roof level, the Site Access Controller shall demarcate the building edge and site area and display appropriate warning signs. Where work is performed in buildings, access shall be gained via lifts or stairwells and the Site Access Controller shall control access into the site area entrance. Where work is performed on rooftops, access shall be gained via lifts or stairwells leading to an exit door, opening onto the roof. The Site Access Controller shall control access onto the rooftop site, at this exit door. Where work is performed on monopole or lattice towers, access shall be gained onto the site, via a gate. The Site Access Controller shall control access into the site, at this gate. Otherwise access onto the monopole or lattice tower can be gained via the purpose built climbing ladder.

**d) Preliminary Inspections and briefing**

The Site Supervisor, shall before any work is to commence, perform Preliminary Inspections of the site, using the “RF Antenna and Feeder Installations Checklist”. He shall furthermore; brief his Installation Technicians on the dangers associated on the specific site.

**3.3.2 ROPE ACCESS (RIGGING)**

Prior to commencement of aerial rigging, relative working positions of all members of the team are determined by the Site Supervisor and shall effectively divide the team up into:

- .  An aerial team working on the tower; and
- .  A ground team which shall work in support of the aerial team.

**a) Rigging Equipment Installation**

The rigging plant and equipment to be used are installed securely on the tower, as follows:

- .  Snatch block and securing chain at highest practical and safe point on suitable purpose installed anchorages;
- .  The rigging rope must be treaded up the tower following a route which is clear of obstructions, sharp appendages and in such a manner that when placed under strain, it does not chafe or rub against existing structures;
- .  The lead tail of the rigging rope must be treaded around the pulley and fed back down to ground level on the outside of all elements of the tower to enable hauling items upwards so as to prevent fouling and/or impact between equipment and the tower;

**3.2.3 RF ANTENNA, BRACKETS & FEEDER INSTALLATION****a) HAULING & SECURING ANTENNA ASSEMBLIES**

The procedure for hauling and securing antennae assemblies are as follows:

- Prior to hauling, two aerial rigging assistants must secure themselves by means of both lanyards in the vicinity of where the antennas are to be secured;
- The antennas and brackets shall be tied to the lead head of the rigging rope by means of a double reefed round turn and two half hitches to facilitate ease of untying the rope once the

- antennas are securely attached;
- ☐ Antennas and brackets shall be hauled by at least two team members standing on the ground at a rate which will minimize shocks in the event of an accidental contact between the load and the tower/mast;
- ☐ When the antenna assemblies arrive at the level where they are to be secured, the aerial rigging assistants shall signal the ground crew to stop and the bottom end of the rigging must be secured to prevent accidental slippage;
- ☐ The aerial team shall pull in the antennas and brackets and secure them in a correct and safe position;
- ☐ Once all bolts and nuts have been properly tightened, the lead tail of the rigging rope shall be untied and fed back to the ground level for the next load.
- ☐ This procedure shall be repeated until all antennas and brackets are securely installed.

**b) HAULING RF FEEDER CABLES**

The procedure for hauling RF Feeder Cables is as follows:

- ☐ The vertical route of the rigging rope must be altered so that the hauling end now follows a clear path on the outside of the tower and the load end follows the proposed route of the feeder cable along it entirely from bottom to top;
- ☐ The load must be attached to the head of the feeder cable using a hauling trek or a looped fly-rope which is securely attached to the feeder cable head;
- ☐ Aerial rigging assistants shall reposition themselves at transitionally points, e.g. where the proposed route deviates from the vertical plane so that they can guide the cable to prevent scuffing and subsequent damage to the cable;
- ☐ Whilst occupying these positions, the aerial rigging assistants must securely attach themselves to the tower's/mast's main structure via both fall arrest and working lanyards;
- ☐ When the head of the RF Feeder cable has reached its final uppermost destination, the cable must be secured with at least 5 (five) cable ties, run blocks or cable clamps to prevent accidental slippage;
- ☐ Once all cables have been hauled, the team shall proceed to secure all the RF Feeder cables onto the cable rungs, cable trays and/or cable gantries until the RF Feeder cables are supported securely along its entire vertical and horizontal length;
- ☐ Whilst securing the RF Feeder cables, all members of the team working on the tower structure must ensure that they

attach themselves via the respective lanyards to the main members of the tower/mast structure;

**e) DE-RIGGING**

Once all aerial work is complete, the following “de-rigging” procedure is to be followed:

- The aerial rigging assistants must feed out the rigging rope and lower it all the way with manual assistance to prevent it from dropping under its own weight;
- The snatch block must be removed and brought down from the tower/mast manually;
  
- The rigging rope must be coiled up for transport in such a manner, that no part of the rope is knotted, kinked and/or strained;
- The rigging rope must be loaded for transport in a location in the motor vehicle where it is not in contact with chemical compounds that shall corrode or degrade the rope and where it is clear of objects that can damage the fiber;
- On return to base, the rope and snatch block must be returned to the Health & Safety Officer for inspection and storage in an area where it is not in contact with chemical compounds that shall corrode or degrade the rope and where it is clear of objects that can damage the fiber.

**VERTICAL LIMITS cc**

**CURRICULUM VITAE &  
CERTIFICATES OF TRAINING  
(Proof of Competency)**

**4.1 CURRICULUM VITAE OF VERTICAL LIMITS****a. Vodacom Mozambique – GSM (2003/08/01-2003/12/15)**

1. Mounting and optimizing of antennas
2. mounting brackets for antennas
3. Installed 7/8 feeders including hanger kits, earth kits, connectors, antenna tails and sure protection.
4. VSWR and Return loss sweep tests.
5. Hand over procedures with client.

Installed a total of 25 sites and done the hand over within the required time limit.

**b. Vodacom Mozambique – Transmission (2003/09/01-2003/12/15)**

1. Assembling of antennas (0.3m to 2.4m)
2. Rigging of antennas and outdoor units
3. Feeder installation including earth kits and sure protection.
4. Installation of indoor units including necessary cabling.

Installed 15 sites.

**c. Telkom SA**

Panned links between Tafelkop in Ellisras and Rooiberg 85km hop, and from Rooiberg to Koperkop in Alldays 83km hop.

Antenna recovery in Middelburg.

**d. Niger and Bercino Faso Celtel**

Installed 6 x GSM sites

1. Installed panels and omni antennas.
2. Installed mounting brackets for antennas
3. Installed 7/8 feeders including hanger kits, earth kits, connectors, antenna tails and sure protection.
4. Sweep tests printed
5. Installed 1 x Transmission link.

**e. DRC Vodacom (Transmission)**

Installed backbone from Kinshasa to Moanda. (Bacongo area)

1. Assembling of antennas (0.3m to 2.4m)
2. Rigging of antennas and outdoor units.
3. Feeder installation including earth kits and sure protection.
4. Installation of indoor units including necessary cabling.
5. Commissioning and panning of radios and antennas.
6. Maintenance

Installed 25 sites.

**f. UMTS 3G upgrades Vodacom**

1. Installed new GSM antennas.
2. Installed feeder 7/8 and 1/4inch incl. earth kits and sure protection.

### Equipment Installation & RF Reticulation

3. Mounting of antenna poles on buildings and towers.
4. Sweep tests printed.
5. Installed diplexers and TMA's.
6. Installed new gantry's.

Installed 13 sites.

#### g. **Cell C – GSM**

1. Installed panel antennas.
2. Installed mounting brackets for antennas
3. Installed 7/8 feeders including hanger kits, earth kits, connectors, antenna tails and sure protection.
4. Sweep tests.

#### h. **UMTS 3G upgrades MTN**

1. Installed new GSM antennas.
2. Installed feeder 7/8 and 1/4inch incl. earth kits and sure protection.
3. Mounting of antenna poles on buildings and towers.
4. Sweep tests printed.
5. Installed diplexers and TMA's.
6. Installed new gantry's.

#### i. **Motorola BTS installations and commissioning.**

1. Logistics
2. Recovery of M-cell and Horizon I racks and replacing it with new Horizon II radio's
3. Commissioning and calibration of new equipment.

#### j. 1800 Upgrade in Botswana

1. Installed new GSM antennas.
2. Installed feeder 7/8 and 1/4inch incl. earth kits and sure protection.
3. Mounting of antenna poles on buildings and towers.
4. Sweep tests printed.
5. Installed diplexers and TMA's.
6. Installed new gantry's.

Installed 16 sites.

### **Courses**

- Introduction SDH course (Siemens training centre)
- Mast and tower safety course
- Fall arrest course (Alpinist Safety Consultants)
- Fall arrest course (Height and Safety Consultants)
- Connector attachment training. (Andrew Comsat)

Registration no.: ASA99/009)

- SDH Radio SRAL Administration and maintenance (Siemens training centre)
- Eclipse radio course (Stratex networks)
- Risk assessment for Sub-Contractors
- Motorola Horizon course.

**Equipment worked on**

- Gabriel electronics equipment (Antennas for Telkom)
- DMC radio system
- Erickson equipment
- Siemens equipment
- Spinner equipment
- Shuner equipment
- Andrew equipment
- Motorola equipment
- Eclipse radios

**4.2 CURRICULUM VITAE'S OF VERTICAL LIMITS MANAGEMENT**

47 Dalhia street  
Northmead  
Benoni  
1501

Phone 0832545074  
Fax (011)425-0158  
E-mail  
[www.jdboshoff@mweb.co.za](mailto:www.jdboshoff@mweb.co.za)

# **Johannes Daniel Boshoff**

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**Personal**

- Marital status - Single

**information**

- Nationality - White
- Place of birth - Newcastle KZN

# HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

# VERTICAL LIMITS

- ID - 7509065023080
- Languages - English and Afrikaans

## Education

1993 Volksrust High School Volksrust

Standard 10 (N3)

## Professional

Started working May 1995 for Prolantic cc in Boksburg

## experience

JHB

3 Macro RF installations for Vodacom and MTN( 1G,  
2G)

4 Micro cell installations for Vodacom

5 Reticulation in Vodacom containers (installation of all  
equipment)

6 BTS rack swaps for Vodacom (Alcatel, Siemens,  
Motorola and Erickson's BTS's)

7 Installed a HIGH,MEDIUM and LOW security system  
in a Army base in Waterkloof(including 3 phase power,  
electric fencing , CCTV cameras, infrared beams and  
security rooms control panels) 1996

8 Promoted to Site Supervisor in 1997 (JHB)

9 Constructing of WEB towers (10m to 55m) for RDL

- and Vodacom including civil works, earthing, power ,RF and Microwave
- 10 RF and Microwave installations on the DECT system for Alcatel (RSC,RSN,RST )
  - 11 SOLAR panel installations (including RF, Microwave and DC power) in the rural areas on the DECT system for Alcatel
  - 12 Reticulation in the DECT containers (installation of all equipment )
  - 13 Installed Plessey mini links for Vodacom(MDR 5800)
  - 14 Commissioning of Plessey mini links (MDR 5800)
  - 15 Installation of Microwave Dishes (1.2m to 3.4m) , waveguide and Equipment for RDL( Andrews)
  - 16 Build complete sites for Vodacom and Cell C (including earthing , power , civils , tower erection , container and RF)
  - 17 Macro RF installation for Cell C ( 1G, 2G )
  - 18 Cell extenders for Cell C (Eastern and Western Cape)
  - 19 EGSM 900 OVERLAY for Cell C 2005/6
  - 20 Micro-cell installations Cell C 2005/6
  - 21 Reticulation in Cell C containers

## HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

## VERTICAL LIMITS

- 22 Experience in Low loss cables ,coax cables and fiber optic ( RG cables, waveguide ,coax 1/2' ,7/8' ,1-1/4' , 1-5/8" feeder)
- 23 8 years experience in electrical installations (single and 3 phase)
- 24 Managed Prolantic's UMTS(3G) installation for MTN in Gauteng. 2005

### 25 Waverig

- 26 UMTS(3G) installations for Vodacom 2006
- 27 10 Years experience in Abseiling
- 28 2G installations for Mascom in Botswana 2006
- 29 Rad microwave mini links installation and commissioning for MTC in Namibia 2006
- 30 12 Years experience in the Communication Industry
- 31 Civil, Container Build and Reticulation for Telmar Mobile Madagascar 2006
- 32 Started Vertical Limits in April 2007

## TRAINING

- UNIVERSITY OF PRETORIA SA

BSS IMPLEMENTATION TRAINING

Presented by NOKIA

- **ANDREWS INSTITUTE      SANTON S.A**

TERRESTRIAL MICROWAVE

CONNECTOR ATTACHMENT

CERTIFICATE

- **ZOI    FALL    PROTECTION    SYSTEMS**

**(Randburg)**

ZOI / SoLL Vertical Guide Rails

ZOI / SoLL Y-Spar Ladders

ZOI / SoLL Personal Protective Equipment

- **ST JOHN AMBULANCE      BENONI SA**

FIRST AIDER    CERTIFICATE LEVEL 1

## HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

## VERTICAL LIMITS

Johan Janse van Nieuwenhuizen

### Contact Details:

Telephone Number: Home 076 501 3126  
: Work 076 501 3126  
: Mobile 076 501 3126

Postal Address : P.O. Box 1115  
: Elardus Park  
: 0153

### Personal Detail:

Surname Janse van Nieuwenhuizen  
First Name Hendrick Johannes  
Name Johan  
ID Number 7701215111085  
Date of Birth 21 January 1977  
Gender Male  
Marital Status Divorced  
Drivers Lisence Code 08  
Nationality RSA Citizen  
Languages Afrikaans (Home language)  
English (Read, write and speak excellent)  
Zulu (understand and speak excellent)

## HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

## VERTICAL LIMITS

### Tertiary Education:

Certificate            BSS11 & BSS12

Institution            Motorola training centre

Date Obtained        July 2005

Diploma                International Examination  
CCIE Routing & Switching (350-001)

Diploma                Cisco Certified Internet Engineer

Institution            Hatfield Business College

Date Obtained        Written and Passed on the 8th of November 2002

Modules Passed        \* General Network Theory  
\* Identify LAN Technologies  
\* Identify the different Frames types and Structures  
\* BRIDGING AND SWITHING  
\* Identify the different Bridging Standards using different Technologies  
\* TCP/IP Networking  
\* Managing Desktop Protocols  
\* Routing Protocols  
\* Performance and Security Management  
\* WAN Technologies  
\* CISCO®Device Management

Diploma                Cisco Certified Network Professional

Institution            Hatfield Business College

Date Obtained        September 2002

Modules Passed        \* Scalable Networks and Traffic Management  
\* Optimizing and Tailoring router Configuration  
\* Wan Connectivity, DDR and Bridging  
\* Managing, Configuring and troubleshooting Switching Products, Terminals and Modems  
\* Implementing a VLAN

## HEALTH AND SAFETY SITE FILE

## VERTICAL LIMITS

Equipment Installation & RF Reticulation

- \* Installing and configuring Dialup services Products and the Features uses in various applications
- \* Setting up and troubleshooting Network Operations

Diploma Cisco Certified Network Associate

Institution Hatfield Business College

Date Obtained August 2002

Subjects Passed

- \* Cisco-Internetwork Operating (IOS) Systems Software
- \* OSI Reference Model
- \* LANs and LAN Switching
- \* Network Protocols: Understanding the TCP/IP Suite and Novelle NetWare Protocols
- \* Routing
- \* Network Security
- \* Wan Protocols, Point –to-Point, Frame Relay and ISDN

Diploma MCSE 2000 Track

Institution Hatfield Business College

Date Obtained July 2002 - August 2002

Subjects Passed

- \* Microsoft Windows 2000 Professional
- \* Microsoft Windows 2000 Server
- \* Microsoft Windows 2000 Directory Service Admin
- \* Designing Security for Microsoft Windows 2000 Network
- \* Microsoft Windows 2000 Network Infrastructure Administration
- \* Troubleshooting Techniques, Methodologies and Solutions

## HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

## VERTICAL LIMITS

Certificate           A+ & Network+

Institution           CCS Training

Date Obtained       November 1999 - January 2000

Subjects Passed     \* A+ Core Service Technician Exam  
                          \* A+ Dos/Microsoft(r)Windows(r) Service Technician Exam  
                          \* Network+ Certification Exam  
                          (International examinations in both A+ and Network+)

### Secondary Education:

Transvaal Educational Department

Highest Qualification     Senior Certificate

School                    Hoogenhout High School

Year Completed           1994

Subjects passed           \* Afrikaans  
                              \* English  
                              \* Mathematics  
                              \* Science  
                              \* Biology  
                              \* Accounting

## HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

## VERTICAL LIMITS

### Working Experience:

Position	Manager/ Owner
Job Description	Secure contracts with clients. Manage and coordinate projects. Manage human resources Manage finances
Institution	Vertical Limits Telecommunication Services
Contact Person	Neil Boshoff
Mobile	083 254 5074
Year	May 2007 – current
Job Description	Commissioning and installation of various Micro-wave and GSM equipment to expand cellular networks Managing all personnel on site to meet deadlines Liaising with the client to ensure all goes well
Institution	Waverig
Contact Person	Johan Hammond
Mobile	083 451 3336
Year	September 2006 – May 2007
Position	Project Manager
Job Description	Commissioning and installation of various Micro-wave and GSM equipment to expand cellular networks
Institution	Advanced Telecoms
Year	August 2004 – September 2006
Contact Person	Deon Meyer
Mobile	+243 81 444 3505
Position	Commissioner

## HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

## VERTICAL LIMITS

Job Description Commissioning and installation of various Micro-wave and GSM equipment to expand cellular networks

Institution Waverig

Year November 2003 – August 2004

Reason for Leaving Contract ended

Contact Person Johann Hammond

Mobile 083 451 3336

Position Network Support

Job Description Configure changes in network infrastructure; insure connectivity at all times, user support, research, installation and onsite maintenance

Institution Experian

Year March 2003 – September 2003

Reason for Leaving Dismissed

Contact Person N/A due to company policy  
Position Network Support

Job Description Support for users within company and research

Institution Si-Futures

Year 03 February, 2003 - 03 March 2003

Reason for Leaving Supporting one permanent user and 6 on the go users isn't stimulating enough

Contact Person N/A Due to company policy

Telephone Number N/A

## HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

## VERTICAL LIMITS

Position	Dairy Farmer/Owner
Job Description	Managing all aspect of the Dairy which includes administrative duties, building labour relations, product management, financial management and herd management.
Institution	H.J. Dairy
Year	1997 - 2002
Reason for Leaving	The owner sold the farm and relocation on our behalf was not possible
Contact Person	H.J. Janse van Nieuwenhuizen

### General:

Computer Packages	Windows 97, 98, 2000 professional & server (Excel, Word, Access, Powerpoint), TFTP server, Hyper terminal active directory, Microsoft management console.
About myself	I am a man with a lot of ambition. I am success driven and determined to make the best of the opportunities I receive. I am a Hard worker and passionate about the work I do. I believe in myself, My abilities as well as in reliability, loyalty and honesty.

**Waverig cc**

**Health and Safety Checklists**

**HEALTH AND SAFETY SITE FILE**

Equipment Installation & RF Reticulation

**VERTICAL LIMITS**

**5.1 Motor vehicle inspection list**

<b>Name of Motor vehicle inspector</b>	
<b>Vehicle registration number</b>	

**CONDITION OF MOTOR VEHICLE (Gradings to be used)**

The following gradings are to be used to summarize the condition of each item of the Motor Vehicle:

4 75 – 100% Grading Excellent/Very Good

3 61 - 74% Grading Good

2 50 – 60% Grading Average – in a safe working order, but may need attention soon.

1 40 - 50% Grading Poor – needs urgent attention – inform Management immediately.

Description	Items	Mon	Thue	Wed	Thur	Fri	Sat	Sun
<b>ODO Reading</b>	<b>Departure</b>							
<b>ODO Reading</b>	<b>Arrival</b>							
<b>Engine</b>	<b>Cooling water</b>							
	<b>Battery water</b>							
	<b>Oil</b>							
	<b>Brake fluid</b>							
	<b>Fan belt</b>							
<b>Lights</b>	<b>Stop/tail</b>							
	<b>Indicators</b>							
	<b>Park</b>							
	<b>Head lamps</b>							
<b>Tyres</b>	<b>Condition</b>							
	<b>Pressure</b>							
<b>Instruments</b>	<b>Fuel Gauge</b>							
	<b>Temperature Gauge</b>							

# HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

# VERTICAL LIMITS

Description	Items	Mon	Thue	Wed	Thur	Fri	Sat	Sun
	Oil lights							
	Speedo							
<b>Wiper</b>	Condition							
	Operation							
<b>Brakes</b>	Foot/travel							
	Handbrake							
<b>Steering</b>	Freeplay							
<b>Reflectors</b>	Front							
	Rear							
<b>Mirrors</b>	Rear view							
	Wing Left/Right							
<b>Tools/Equipment</b>	Triangles							
	Jack							
	Handle							
	Wheel brace							
	Spare wheel							
<b>Body work</b>	Condition							
<b>Inspector initials</b>	Initial each day							
<b>Comments</b>								

**HEALTH AND SAFETY SITE FILE**

Equipment Installation & RF Reticulation

**VERTICAL LIMITS**

**5.2 POWERED TOOLS INSPECTION CHECKLIST**

EQUIPMENT TYPE	
EQUIPMENT ID No. OR SERIAL No.	
DATE OF FIRST INSPECTION FOR THIS CHECKLIST	
POWERED TOOLS INSPECTOR'S NAME	

**CONDITION OF POWERED TOOL (Gratings to be used)**

The following gradings are to be used to summarize the condition of each item of the Powered Tool:

4 75 – 100% Excellent/Very good

3 61 – 74% Good

2 51 – 60% Average – in a safe working order, but may need attention soon.

1 40 – 50% Poor - needs immediate attention, inform Management immediately.

Hand tool	Defects	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
Guards in good condition								
Connections tight								
No Cable Joints								
Isolation Checked								
Polarity Checked								
Switches Checked								
Plug in working order								
Earth wire connected								
Wire to plug connection								
Equipment safe for use								
Comments								

Where inspected by a Competent Electrical Inspector, declare Powered Tool safe for use, by applying name, signature and date. (3 Monthly)

<b>Inspectors name</b>	<b>Signature</b>	<b>Date</b>

**5.3 HAND TOOLS INSPECTION CHECKLIST**

<b>SITE SUPERVISOR NAME</b>	
<b>DATE OF FIRST INSPECTION FOR THIS CHECKLIST</b>	

**CONDITION OF HAND TOOL (Gradings to be used)**

The following gradings are to be used to summarize the condition of each item of the Powered Tool:

4 75 – 100% Excellent/Very Good

3 61 – 74% Good

2 51 – 60% Average – in a safe working order, but may need attention soon.

1 40 – 50% Poor – needs urgent attention – inform Management immediately.

Hand tool	Defects	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
Spanners								
Side cutters								
Stanley knife								
Hacksaw								
Hand jigsaw								
RF connectorization prep tool								
Screwdrivers								
Others (specify)								
Site supervisors name	Signature	Date						

# HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

# VERTICAL LIMITS

## 5.4 PERSONAL PROTECTIVE EQUIPMENT REQUEST FORM

### Details

Site name	
Site ID	
Site supervisors name	
Date	

As employees are issued Personal Protective Equipment for their use only, please give the names of the personnel elected on your team:

Name of employee	Task description on site

Item no.	Description of PPE required	QTY	If applicable give sizes required
1	2 piece conti suite pants		
2	2 piece conti suite top		
3	Dust coat		
4	Apron		
5	Hard hat with chin strap		
6	Gum boots		
7	Safety boots with steel tap		
8	Working gloves		
9	Asbestos gloves		
10	Safety glasses		

# HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

# VERTICAL LIMITS

11	Face shield		
12	Welding hood		
13	Breathing apparatus		
14	Respirator		
15	Dust/chemical mask		
16	Hearing protection		
17	Thermal suit		
18	Thermal jacket		
19	Jersey		
20	Socks		
21	Full body safety harness		
22	Fall arrest lanyards		
23	Adjustable working harness		
24	Other ( Specify)		
25			
26			
27			

Site supervisors name	Signature	Date
-----------------------	-----------	------

Signed as received by the Health & Safety Officer:

Health and safety officers name	Signature	Date
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**5.5 PERSONAL PROTECTIVE EQUIPMENT ISSUE FORM**

**Employee details**

Full name of employee	
Identity number of employee	
Employees Responsible task description	
Date issued	

**CONDITIONS OF ISSUE**

1. PPE shall be issued at the expense of Waverig cc and therefore remains the property of Waverig cc;
2. Upon return from site, all PPE issued shall be handed to the Health & Safety Officer for Inspection, excepting 2-Piece Conti Suits and Safety Boots which shall be inspected by the Site Supervisor on a weekly basis;
3. Loss or wilful damage to PPE may result in disciplinary action being taken against the employee, after investigation;
4. Failure to use or the incorrect usage of PPE may result in disciplinary action being taken against the employee, after investigation;
5. Any PPE lost or damaged will immediately be reported to the Health & Safety Officer;
6. It is a legal requirement to wear PPE and that refusal to do so can lead to disciplinary procedures being instituted;
7. It is the employee's responsibility to maintain all PPE issued to him/her in a clean and safe condition.

Item no.	Description of PPE required	QTY	If applicable give sizes required
1	2 piece conti suite pants		
2	2 piece conti suite top		
3	Dust coat		
4	Apron		
5	Hard hat with chin strap		
6	Gum boots		

**HEALTH AND SAFETY SITE FILE**

Equipment Installation & RF Reticulation

**VERTICAL LIMITS**

7	Safety boots with steel tap		
8	Working gloves		
9	Asbestos gloves		
10	Safety glasses		
11	Face shield		
12	Welding hood		
13	Breathing apparatus		
14	Respirator		
15	Dust/chemical mask		
16	Hearing protection		
17	Thermal suit		
18	Thermal jacket		
19	Jersey		
20	Socks		
21	Full body safety harness		
22	Fall arrest lanyards		
23	Adjustable working harness		
24	Other ( Specify)		
25			
26			
27			

I understand and accept the conditions of the issue of my Personal Protective Equipment:

Site supervisors name	Signature	Date
-----------------------	-----------	------

Signed as received by the Health & Safety Officer:

Health and safety officers name	Signature	Date
---------------------------------	-----------	------

**5.6 PERSONAL PROTECTIVE EQUIPMENT INSPECTION CHECKLIST**

**Employee details**

Full name of employee	
Identity number of employee	
Employees Responsible task description	
Date issued	

**CONDITION OF PERSONAL PROTECTIVE EQUIPMENT (Gradings to be used)**

The following gradings shall be used to summarize the condition of the employee's PPE:

- 4 75 – 100% Excellent/Very Good
- 3 61 – 74% Good
- 2 51 – 60% Average – in good working order, but may need attention/replacement soon.
- 1 40 – 50% Poor – needs urgent attention, see purchasing department to order new PPE.

Item no.	Description of PPE required	QTY	If applicable give sizes required
1	2 piece conti suite pants		
2	2 piece conti suite top		
3	Dust coat		
4	Apron		
5	Hard hat with chin strap		
6	Gum boots		
7	Safety boots with steel tap		
8	Working gloves		
9	Asbestos gloves		
10	Safety glasses		
11	Face shield		

# HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

# VERTICAL LIMITS

12	Welding hood		
13	Breathing apparatus		
14	Respirator		
15	Dust/chemical mask		
16	Hearing protection		
17	Thermal suit		
18	Thermal jacket		
19	Jersey		
20	Socks		
21	Full body safety harness		
22	Fall arrest lanyards		
23	Adjustable working harness		
24	Other ( Specify)		
25			
26			
27			

I hereby certify that the Personal Protective Equipment have been inspected by myself, the Health & Safety Officer, for week ending:

Health and safety officers name	Signature	Date

**HEALTH AND SAFETY SITE FILE**

Equipment Installation & RF Reticulation

**VERTICAL LIMITS**

**5.7 FIRST AID KIT CONTENTS CHECKLIST**

<b>Name of first-aidier</b>	
<b>Date of first inspection</b>	

Item no.	Contents	QTY	Mon	Tue	Wed	Thurs	Fri
1	CPR mouth piece						
2	Latex gloves						
3	Safety pins						
4	Pair forceps						
5	Pair of scissors						
6	50ml certrimide solution						
7	30ml certrimide cream						
8	Eye drops						
9	Eno antiacid						
10	Paracetamol						
11	Fabric plasters						
12	3m plaster roll						
13	Sterile eye pad						
14	Eye patch						
15	Cotton wool						
16	Packs bleached gauze						
17	Bum cover						
18	Triangular bandage						
19	Bandage small						
20	Bandage medium						
21	Bandage large						
Health and safety officers name		Signature		Date			

# HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

# VERTICAL LIMITS

## 5.8 RF ANTENNA & FEEDER INSTALLATION CHECKLIST

Site name	
Site ID	
Client	
Principal contractor	
Contractor	
Site supervisor	
Date	

Emergency contact details (Local awareness)	
Local ambulance contact number	
Local hospital contact number	
Local hospital address	
Local SAPS contact number	

Item no.	Activity	Check	Comments/observations
1	Pre-site establishment		
a)	Inspected the motor vehicle intended for use		
b)	Ensure the following equipment is loaded		
	Rigging equipment		
	Power Tools		
	Hand tools		
	Personal Protective equipment		
	First-aid kit		
	Fire extinguisher		

# HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

# VERTICAL LIMITS

Item no.	Activity	Check	Comments/observations
c)	Prior to leaving for site ensure that the following completed documentation is in the site file		
	Letter of appointments		
	Certificates of training		
	Motor vehicle inspection list		
	Powered tools inspection list		
	Hand tools inspection list		
	Personal protective equipment issue form		
	Personal protective equipment inspection list		
	First-aid check list		
<b>2</b>	<b>Site establishment and preparation</b>		
a)	Ensure that permission has been obtained from client and that the access card and keys have been issued		
b)	Are there any other contractors on site		
c)	If yes is it a safe working environment		
d)	Site access controller to assess site and demarcate "No go zone" area with danger/banner tape, cones and sign.		
<b>3</b>	<b>Preliminary inspections and briefing</b>		
a)	Check weather conditions, in the event of rain and/or lightning storm, do not commence work until tower is dry and/or lightning subsides		
b)	Check base flange and gusset welds for cracks		
c)	Check transition flange welds for cracks		
d)	Check all base and transition flange nuts/bolts		

# HEALTH AND SAFETY SITE FILE

Equipment Installation & RF Reticulation

# VERTICAL LIMITS

Item no.	Activity	Check	Comments/observations
e)	Check if tower is dry		
f)	Assign tasks: An aerial team A ground team		
g)	Brief all persons and inform All Aerial Installation Technicians to secure tools and loose items, using tool pouches; All persons to wear hard hats at all times; All communication to be verbal in English with eye contact; All instructions to be clearly acknowledged before proceeding; If something is dropped always shout "HEADS"		
	Remind persons that no items, equipment or tools are to be deliberately dropped from any height of the tower		
<b>4</b>	<b>RIGGING/HAULING OF EQUIPMENT</b>		
a)	Ensure that the procedure for Rigging/Hauling Equipment is applied as per our Methods and Procedures of our Health & Safety Plan, ensuring that observations are made of the following: Snatch block and securing chain are secured to the highest, purpose installed anchorage; Rigging Rope is treaded clear of obstructions and sharp appendages; The lead tail of the Rigging Rope the pulley and fed back to ground level outside of elements of the tower;		

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Equipment Installation & RF Reticulation

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	The two Aerial Installation Technicians are secured by means of both lanyards in the vicinity where the antennae are to be secured;		
	Antennae assemblies are safely secured to the lead head of the Rigging Rope;		
	Antennae assemblies are hauled by two members of ground level;		
	Antennae assemblies are secured properly before untying lead head of rigging rope.		
	When feeder cable as reached its final destination, cable to be secured with 5 (five) cable ties, runblocks or cable clamps;		
	All Installation Technicians to be secured to the tower structure, whilst securing feeder cable.		
5	DE-RIGGING		
a)	Rigging Rope to be fed down with manual assistance;		
b)	Snatch Block and securing chain to be brought down manually;		
c)	Rigging Rope to be coiled up without knots, kinks and/or strain;		
d)	Rigging Rope loaded in a location in the Motor Vehicle free from any chemical compound and/or sharp objects;		
6	OTHER		

Name of site supervisor	Signature	Date

**VERTICAL LIMITS cc**

**Appointments**

## **Company Owners**

**H. J. Janse van Nieuwenhuizen**  
**J. D. Boshoff**

## **Project and administrative manager**

**H. J. Janse van Nieuwenhuizen**

## **Project and technical manager**

**J. D. Boshoff**

## **Site Supervisor's**

**E. Grimbeek**  
**Aron**

## **Skilled workers**

**Dumisani**  
**Alfred**

## **Semi-Skilled workers**

**Frans**  
**Alfred**