



KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

MADADENI PROVINCIAL HOSPITAL UPGRADE TO STUDENT ACCOMMODATION

ANNEXURE 4

Mechanical Eng Specification



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

MECHANICAL VENTILATION SPECIFICATION

**MADADENI PROVINCIAL HOSPITAL
UPGRADE TO STUDENT ACCOMODATION**

Prepared by:



MADADENI HOSPITAL
PIETERMARITZBURG

UPGRADE TO STUDENT ACCOMODATION

Table of Contents

1. GENERAL.....	5
2. THE PROJECT.....	5
3. THE WORK.....	5
3.1. KITCHEN EXTRACT SYSTEMS.....	6
3.2. TOILET EXTRACT SYSTEMS.....	6
3.3. FRESH AIR SYSTEMS.....	7
PAINTING.....	7
3.4.....	7
3.5. AS BUILT CAD DRAWINGS.....	7
3.6. MAINTENANCE AND GUARANTEE.....	7
3.7. TRAINING.....	7
COMMISSIONING.....	7
3.8.....	7
3.9. OPERATING AND INSTRUCTION MANUALS.....	8
3.10. MAINTENANCE.....	8
4. WORK THAT FORMS PART OF THIS CONTRACT.....	8
4.1. BUILDERS WORK.....	8
4.2. DOOR GRILLES AND UNDERCUTS.....	8
4.3. ELECTRICAL WORK.....	9
4.4. GENERAL WORK.....	9
5. SYSTEM OPERATION.....	9
5.1. GENERAL.....	9
6. AIR FILTERS.....	9

**MADADENI HOSPITAL
UPGRADE TO STUDENT ACCOMODATION**

VENTILATION SPECIFICATION

PARTICULAR SPECIFICATION

1. GENERAL

The standard requirements for the Air-conditioning and Ventilation are available on Department of Health website.

Any requirement or statement made in this specification shall override the relevant requirements on the standard specification.

2. THE PROJECT

The project shall consist of the supply, installation, testing, commissioning and 12 months guarantee (with free maintenance during the guarantee period) of the Ventilation to Madadeni Hospital, Student Accommodation .

The installation in this specification, and on the drawings and shall include all the equipment and controls necessary for the safe and efficient operation of the system.

3. THE WORK

The work covered by this tender shall comprise, but not be limited to, the detailing (shop drawings), purchase, manufacture, delivery, erection, commissioning, insurance, maintenance and guarantee of the Ventilation to Madadeni Student Accommodation, all in accordance with specification, the Schedule of Quantities, the drawings, any appendices or addenda thereto and relevant local or national standards and codes.

The summary of the work is as follows :-

3.3. FRESH AIR SYSTEMS

Supply and install 9 No Fresh air systems. The systems shall include the supply and installation of fresh air supply grilles positioned in the ceiling corridor as indicated on the drawings.

The contractor shall supply and install supply fans to extract the air from the toilets. All fan assemblies shall be supported on each attenuator with antivibration mounts, for easy removal of the fan. The intake air shall be filtered before being delivered into the corridor.

Fans shall be connected with un-insulated galvanised sheet metal ductwork all manufactured to specification. All of this ductwork shall remain exposed. All exposed ductwork, shall be degreased and primed with galvogrip and painted, black.

3.4. PAINTING

Painting of all exposed ductwork and equipment shall form part of this work.

3.5. AS BUILT CAD DRAWINGS

As built CAD drawings and operating and maintenance manuals properly indexed to differentiate between the systems shall form part of this work.

3.6. MAINTENANCE AND GUARANTEE

Maintenance and guarantee for (12) months after “practical completion” date of the completed installation, or sections thereof.

3.7. TRAINING

Training of maintenance staff in the operation and maintenance of the installations during the practical (12) month maintenance and guarantee period.

3.8. COMMISSIONING

The commissioning of all new plant and the re-commissioning of any and all existing equipment, which may be affected by the new installations or by the modifications being carried out shall be included in this contract.

4.3. ELECTRICAL WORK

Upgrade of main electrical supply for the supply for the new ventilation installation.

4.4. GENERAL WORK

Painting of plantroom walls, ceilings and floors.

Supply of water for testing and commissioning period prior to “practical completion” of installations.

Supply of electricity for testing and commissioning period to “practical completion” of installations.

Any other item specifically hereinafter mentioned as being delivered, supplied and fitted etc. by others.

5. SYSTEM OPERATION

The operation of the various systems shall be as follows:

5.1. GENERAL

The Fresh air and toilet extract systems shall be controlled by a 7 day timer to run 24 Hours.

The canopy extract systems shall be controlled by means of a stop/start located adjacent to the stove.

6. AIR FILTERS

Air filters shall be high performance washable type housed in adequate holding frames and fitted with gaskets to ensure a positive airtight seal around them.

The guarantee shall provide for all parts, spares and appurtenances which become effective during the guarantee period, to be replaced free of charge to the Employers. All costs of labour, out-of-town allowances, materials and transportation required to replace such part of a defective installation shall be borne by the Subcontractor and shall be included in his guarantee. The Subcontractor shall cede to the Employers the remainder of any equipment guarantee which he has received from his suppliers and which may extend beyond the period of twelvemonths mentioned herein.

10.2. EXTENDED GUARANTEE

Where certain new equipment have supplier's standard guarantee clauses which do not correspond with the guarantee Clause 10.1 the Subcontractor shall allow in the tender price for the extension of guarantees and additional charges thereof, in order to comply with guarantee clause.

11. OPERATING AND MAINTENANCE MANUALS

Operating and Maintenance Manuals shall be prepared as suggested in Chapter 59 of 1987 ASHRAE HANDBOOK (HVAC Systems and Application).

Three sets of completed O&M Manuals are required including two sets of hard copy drawings and two CD's of all drawings.

12. COST STRUCTURE FOR VARIATIONS

The cost structure of the original tender shall be strictly applied to all variations. Labour rates shall be as at the time of tender. Materials shall be escalated back to tender date. Escalation shall be applied where applicable, to all progress payments including payments for variation orders.

TOILET EXTRACT FAN 1

EQUIPMENT SPECIFICATION			
AXIAL FLOW FANS			
SPECIFIED		OFFERED	
Manufacturer	Donkin	Manufacturer	
Series	Bellax		
Fan Type	Long Axial		
Size/Code	315.15.B4		
Impellor Type	Broad Aerofoil		
Speed	2880		
Motor Kw	0.55		
Enclosure/Protection	TE/IP55		
Insulation Class	F		
Power supply	400/3/50		
No of Blades	8		
Blade angle °	7		
Airflow l/s	600		
Total Pressure Pa	200		
Attenuators	AS2		
AVM'S No	8		

TOILET EXTRACT FAN 2

EQUIPMENT SPECIFICATION			
AXIAL FLOW FANS			
SPECIFIED		OFFERED	
Manufacturer	Donkin	Manufacturer	
Series	Bellax		
Fan Type	Long Axial		
Size/Code	315.15.B4		
Impellor Type	Broad Aerofoil		
Speed	2880		
Motor Kw	0.55		
Enclosure/Protection	TE/IP55		
Insulation Class	F		
Power supply	400/3/50		
No of Blades	8		
Blade angle °	7		
Airflow l/s	800		
Total Pressure Pa	200		
Attenuators	AS2		
AVM'S No	8		



health

Department:
Health
PROVINCE OF KWAZULU-NATAL

HOT & COLD WATER SPECIFICATION

**MADADENI PROVINCIAL HOSPITAL
UPGRADE TO STUDENT ACCOMODATION**

Prepared by:



**BLACK
BALANCE**

INNOVATIVE
SUSTAINABLE
SOLUTIONS

**MADADENI PROVINCIAL HOSPITAL
HOT & COLD WATER SPECIFICATION**

**SUPPLY, DELIVERY, INSTALLATION AND
COMMISSIONING OF HOT & COLD WATER
INSTALLATION**

MADADENI HOSPITAL
PIETERMARITZBURG

UPGRADE TO STUDENT ACCOMODATION

Table of Contents

1. TECHNICAL SPECIFICATION.....	4
2. INTRODUCTION.....	4
3. COLD WATER DISTRIBUTION	4
4. HOT WATER DISTRIBUTION.....	5
5. PLANT DAILY OPERATION.....	5
6. PIPING AND SYSTEM FITTINGS.....	5
7. VALVES.....	6
8. OPERATING AND MAINTENANCE MANUALS.....	6
8 COMMISSIONING AND TESTING & MAINTENANCE.....	7
9 STANDARDS.....	7
10 LIST OF DRAWINGS	7

PART 1

MADADENI HOSPITAL UPGRADE TO HOSTEL ACCOMODATION

HOT AND COLD WATER SPECIFICATION

1. TECHNICAL SPECIFICATION

This Supplementary Specification is for the supply, delivery and installation of Hot and cold water installation at the Madadeni Hospital, Student Accommodation, Pietermaritzburg.

2. INTRODUCTION

The contractor shall supply hot and cold water to the proposed hostel, all as indicated on the tender drawings.

3. COLD WATER DISTRIBUTION

Cold water shall be supplied from a central reticulated plant-room as indicated on the drawings. The hot water plant does not form part of this installation. All existing hot and cold water feed to the building shall be disconnected and removed. New pipework as indicated on the drawings shall be installed to the building. The work on this project is confined to hot, cold and return pipework and fittings only. The cold water supply forms part of the Civil works and is covered under the Civil contract.

New hot and cold water supply pipework shall be trenched underground. Trenching shall be a maximum of 500mm wide and 750mm deep. Pipework shall be laid on a bed of minimum 100mm Umgeni sand top and bottom. Pipework shall be backfilled and compacted with site excavation material. Should the fill be unsuitable for backfilling, the contractor shall inform the Engineer and a decision shall be taken by the Principal Agent on the necessary cause of action.

All domestic water underground pipework shall be HDPE CLASS 10 flanged and welded unless otherwise indicated. The entire installation shall be pressure tested to 600 KPa. All pipework above ground shall be Class 2 copper. All hot water pipework in plant-room shall be insulated and clad with 0.5mm aluminium sections.

4. HOT WATER DISTRIBUTION

4.1 Hot Water Distribution

Hot water to the building shall be generated by others. Isolating valves shall be provided in the plant room and all pipework to the Accommodation Block shall commence from this point on.

INSULATION

Contractor shall insulate all exposed hot water piping with preformed thermaflex sections, all strictly in accordance with manufacturer's specifications.

All insulation sections shall be properly glued together. No sections shall be exposed to the atmosphere and the pipework. Insulation at bends to be properly mitred and glued. Insulation at supports shall fit over the support and glued into place with an overlap of not less than 100mm on either side of the support.

Where double insulation is applied, the double section must overlap a joint by at least 100mm on either side of the joint.

Pipe Bore: (Millimetres)	Thickness: (Meters)
Up to 54	15
76 to 108	30

All underground pipework to be insulated with 30mm Thermaflex insulation.

5. PLANT DAILY OPERATION

All hot water systems shall operate 24hrs.

6. PIPING AND SYSTEM FITTINGS

6.1 Piping Material

All domestic water pipes underground pipework shall be HDPE CLASS 10 unless otherwise indicated. All pipework above ground shall be Class 2 copper.

6.2 Painting

No painting is required for the pipework.

6.3 Pipe Hangers And Brackets

Pipe hangers and supports shall be installed at the following maximum centres: -

Pipe Bore: (Millimetres)	Distance Between Supports: (Meters)
Up to 10	1, 0
12 to 15	1, 25
22	1, 8
28 up to 50	2.5
65 to 100	3.0

Additional supports shall be installed where dictated by structural details:

7. VALVES

All valves to be ball valves or butterfly with stainless steel bodies and balls and PTFE or Teflon seals. They shall be suitable for a working pressure of 1000 Kpa gauge.

Valves shall be fitted into the pipeline by means of capillary hard soldered joints containing silver.

8. OPERATING AND MAINTENANCE MANUALS

8.1 General

At the completion of the project the contractor shall supply three copies of "Operating and Maintenance Manuals" containing the following information: -

A general description of the systems.

Plant operating instructions.

Leaflets and general information on all installed major equipment.

Regular and routine maintenance schedules.

Final commissioning data.

'As-Built' drawings and electrical wiring and control diagrams.

All the above documents shall be bound into a durable plastic 'ring binder' file, and suitable indexed and titled.

The documents shall also be provided in software on a computer disc.

8 COMMISSIONING AND TESTING & MAINTENANCE

9.1 Commissioning

Upon the 'Practical Completion of the Contract Works', the contractor shall efficiently test and commission all relevant items of equipment before setting such equipment into regular operation.

9.2 Maintenance and Guarantee

The contractor shall be responsible for a full 12 months maintenance and guarantee for all mechanical equipment installed on this plant.

The contractor shall ensure that regular monthly maintenance is carried out on the installation and must be signed by the user. A copy of the signed visit must be emailed to the Engineer for records.

9 STANDARDS

SANS 460 – Copper tubes for domestic plumbing services.

SANS 966-1 – HDPE tubes for domestic plumbing services.

The contractor shall provide all protective devices, etc. and arrange for all inspections, tests, certificates, etc. necessary to comply with the said Acts, Regulations and By – Laws, whether specified herein or not.

10 LIST OF DRAWINGS

The following drawings are issued with this tender:

21066_101_M01	Hot and cold water Layout Ground Floor Hostel.
21066_101_M02	Hot and cold water Layout First & Second Floor
21066_101_M03	Hot and cold water Piping Diagram.



KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

MADADENI PROVINCIAL HOSPITAL UPGRADE TO STUDENT ACCOMMODATION

ANNEXURE 5

JV Agreement



Annexure 5
Joint Venture Agreement
(March 2004)
(First Edition of CIDB document 1017)

1. **PREAMBLE**

This agreement is made and entered into by and between

of the first part and

of the second part and

of the third part.

(allow for additional parties as necessary).

Whereas the foregoing parties have resolved to form a Joint Venture under the title of

for the exclusive purposes of securing and/or executing the Contract to be awarded by
(name of Employer)

to the Department of Health in respect of the following project:

for (brief description of Contract)

MADADENI PROVINCIAL HOSPITAL UPGRADE TO STUDENT ACCOMMODATION

Now it is hereby agreed as follows :

2. **DEFINITIONS AND INTERPRETATION**

2.1 Definitions

The following words and expressions shall have the meanings indicated, except where the context otherwise requires. Defined terms and words are, in general, signified in the text of the Agreement by the use of capital initial letters, but the absence of such letters does not necessarily signify that a term, or word, is not defined.

'Agreement' means the agreement between the Members of the Joint Venture and includes this model form of agreement together with the Preamble, Specific Provisions, if any, Schedules 'A', 'B' and 'C' and any relevant Documents prepared prior to the signing of the Agreement and appended thereto.

'Contract' means the contract with the Employer for the supply of the Deliverables, for the purposes of securing and executing which, the Joint Venture has been formed.

'Deliverables' means the works and/or services, equipment, materials, goods, etc. to be furnished by the Joint Venture to the Employer in terms of the Contract.

'Document' means any written, drawn, typed, printed, or photographic material, which relates to the Agreement.

'Employer' means the person, or body, which is to award the Contract and will employ the Joint Venture if it is awarded the Contract.

'Joint Venture' means the joint venture formed by the Members in accordance with the Agreement.

'Management Committee' means the body established in terms of the Agreement to manage all aspects of the work of the Joint Venture in securing and executing the Contract and in meeting the provisions for the Agreement.

'Member' means a person, or body which, being a party to the Agreement, is a member of the Joint Venture.

'Member's Interest' means the proportion expressed as a percentage, which the total monetary value of all resources provided and contributions made by a Member towards the execution by the Joint Venture of the Contract bears to the total of such values by all Members and, unless otherwise indicated in the Agreement, represents the extent to which the Member participates in the fortunes of the Joint Venture.

'Representative' means the person representing a Member on the Management Committee.

'Schedules' means Schedules 'A', 'B' and 'C' which set out general, financial and other information relating to the Members and the obligations, duties, rights, risks and benefits arising from their participation in the Joint Venture.

'Specific Provisions' means the variations, if any, required to this standard form of agreement for the specific purposes of the Agreement.

2.2 Interpretation

Unless inconsistent with the context, an expression in the Agreement which denotes:

- any gender shall include the other genders
- a natural person shall include a juristic person and vice versa
- the singular shall include the plural and vice versa

2.3 Headings

The headings to clauses of the Agreement shall not be considered part thereof, nor shall the words they contain be taken into account in the interpretation of any clause.

2.4 Law

The Agreement shall be construed in accordance with and governed by the laws of the Republic of South Africa and the English language versions shall prevail.

2.5 Language

English shall be exclusively used by the Members in the preparation of Documents unless otherwise indicated.

2.6 Conflict between Agreement and Contract

Should any provision of the Agreement be in conflict with the terms of the Contract, the Agreement shall be amended to the approval of the Management Committee so as to eliminate the conflict.

3. **JOINT VENTURE GENERAL**

3.1 Establishment and Purpose

The Joint Venture established by the Members in terms of the Agreement is an unincorporated association with the exclusive purposes of securing and executing the Contract for the benefit of the Members.

3.2 Termination

The operation of the Joint Venture and the validity of the Agreement shall terminate if and when it becomes evident that the Joint Venture will not be awarded the Contract, or, if the Joint Venture secures the Contract, when all obligations and rights of the Joint Venture and the Members in connection with the Contract and the Agreement have ceased and/or been satisfactorily discharged.

Unless otherwise decided by the Management Committee, the Agreement shall not terminate if a Member changes its name, or is taken over by, or merged with, another body.

This agreement will terminate when any one of the Members resigns, are liquidated or opts out of this agreement and the Joint Venture will be in breach of contract with the Employer and their contract could be cancelled.

3.3 Exclusivity

Unless otherwise agreed by the Management Committee, or provided for in the Contract no Member shall engage in any activity related to the Contract other than as a Member of the Joint Venture and Members shall ensure that their subsidiaries and other bodies over which they have control comply with this requirement.

3.4 Participation of Members

Except as may otherwise be stipulated in the Agreement, each Member shall be responsible for all costs incurred by it prior to the date of inception of the Agreement.

Subsequent to the date of inception of the Agreement, each Member shall, participate in the operations, risks, responsibilities and fortunes of the Joint Venture including, inter alia, the provision of funding, sureties, guarantees, insurances, human and other resources and participation in profits and losses to the extents indicated in the Schedules. Participation in any aspect not covered in the Schedules shall, if an agreement cannot be reached between the Members, be to the same extents as indicated by the Members Interests.

3.5 Management

The affairs of the Joint Venture shall be directed and controlled by the Management Committee, as set out in Section 4 hereof.

3.6 Confidentiality

All matters relating to the Agreement and the Contract shall be treated by the Members as confidential and no such matter shall be disclosed to any third party without the prior written approval of the Management Committee.

No Member shall be party to the dissemination of publicity relating to the Contract, or the Agreement, without the prior written approval of the Management Committee and the Employer.

3.7 Assignment

No Member shall cede, assign, or in any other way make over any of its rights, or obligations, under the Agreement without the prior written consent of the Management Committee.

3.8 Subcontracting

No Member shall subcontract any obligation, work or duty for which it is, itself, responsible in terms of the Agreement without the prior written consent of the Management Committee.

3.9 Variations to Agreement

No variation, modification, or waiver of any part of the Agreement shall be of any force, or effect, unless unanimously agreed by the Members and reduced to writing.

3.10 Liability

Each Member warrants that it will indemnify the other Members against all legal liabilities arising out of, or in connection with the performance of its obligations under the Agreement.

It is acknowledged by the Members that they may be held jointly and severally liable in respect of claims against the Joint Venture by the Employer or third parties.

4. MANAGEMENT OF JOINT VENTURE

4.1 General

The affairs of the Joint Venture shall be directed, controlled and managed by the Management Committee, which, within the terms of the Agreement and the Contract, shall have full authority to bind the Members in all matters relating to the affairs of the Joint Venture.

Communication between the Joint Venture and the Employer, or third parties, relating to the Contract shall be conducted exclusively by the Management Committee, or by such person as it may delegate to perform this function.

The Management Committee shall have the power to appoint a project manager and/or such other persons as it may see fit to appoint for the purpose of executing the Contract and may delegate such of its powers, responsibilities and duties as it may consider necessary, or desirable, to persons or bodies appointed or seconded for this purpose.

Such administrative functions as are necessary to ensure the effective operation of the Management Committee shall be performed by its chairman.

4.2 Management Committee

4.2.1 Composition

The Management Committee shall, unless otherwise agreed by all the Members, consist of one Representative of each Member and each Member shall be obliged, at all times, to maintain a Representative on the Management Committee.

Each member shall, not later than three working days after the signing of the Agreement, appoint its Representative and notify the other Members of the name and contact details of the Representative. Such Representative shall have the power to bind the Member that he represents in all matters relating to the execution of the Contract and the performance of the Agreement.

A Member shall be entitled, after giving the other Members not less than three working days written notice of his intention to do so, appoint, remove and/or replace, an alternate who shall, at any meeting of the Management Committee from which the Representative whom he represents is absent, be vested with all rights and powers and subjected to all the obligations of the absent Representative.

The chairman of the Management Committee shall be the Representative of the Member which has the largest Member's Interest. If two, or more, Members have the same, largest Member's Interest, the chairmanship shall rotate between the Representatives of such Members at three monthly intervals, the order of rotation to be determined by ballot.

Notwithstanding the foregoing, the chairmanship of the Management Committee may be determined, or changed, at any time by unanimous decision of the Management Committee.

No remuneration shall be paid by the Joint Venture to Representatives or their alternates for serving on the Management

4.2.2 *Meetings*

Meetings of the Management Committee shall take place at such times and places as the Management Committee may determine, provided that the chairman shall convene a meeting of the Management Committee to be held not later than ten working days after he has been requested, in writing, by a Member to do so. Not less than five working days written notice of any meeting of the Management Committee shall be given to all Representatives and their alternates.

The Management Committee may permit, or invite, persons other than Representatives or alternates to attend any of its meetings, but such persons shall not have voting rights.

4.2.3 *Decisions*

Each Representative shall have one vote on the Management Committee and where, in terms of this clause, a casting vote is required, this shall be exercised by the chairman.

All decisions of the Management Committee shall, desirably, be unanimous. Accordingly, if unanimity cannot, initially, be achieved in regard to a decision, the meeting at which that decision is sought shall be adjourned for a period of 48 hours to enable Representatives to consult with their principals. If, on resumption of the adjourned meeting, unanimity can still not be achieved, the decision, provided it is not one requiring unanimity of the Members, shall be taken by majority vote and, in the event of a tie, the chairman shall exercise a casting vote.

A Member not satisfied with a majority decision of the Management Committee may declare a dispute, to be dealt with in terms of Clause 8 hereof, but the majority decision shall, nevertheless, be implemented with immediate effect.

Decisions of the Management Committee, whether taken at a meeting, or otherwise, shall be recorded in written minutes, which shall be distributed by the chairman to reach the Representatives not later than five working days after those decisions were taken. Such minutes shall be deemed to have been affirmed by the Representatives unless written notice of dissent is received by the chairman not later than three working days after receipt of the minutes by the Representative.

4.2.4 Powers and duties

The functions, responsibilities and powers of the Management Committee shall include, inter alia, those listed below:

4.2.4.1 Formulating overall policy in regard to the achievement of the objectives of the Joint Venture.

4.2.4.2 Managing the day to day affairs of the Joint Venture.

4.2.4.3 Monitoring, directing and co-ordinating the activities of the Members to ensure that the objectives of the Joint Venture are achieved and that the obligations and responsibilities of the individual Members are met.

4.2.4.4 Monitoring and controlling the financial affairs of the Joint Venture and ensuring that proper books of account and financial records relating to affairs of the Joint Venture are maintained in an approved form and submitted to the Management Committee for approval at regular intervals, which shall not be longer than one month.

4.2.4.5 Determining the necessity for and the details of any changes in the duties and responsibilities of Members provided that any resulting changes in Members' Interests shall be unanimously approved by the Members.

4.2.4.6 Determining the terms and conditions of employment of personnel and the emoluments applicable to staff seconded to the Joint Venture by the Members.

4.2.4.7 Controlling and approving the appointment of all subcontractors.

4.2.4.8 Procuring, after the completion of the Contract and the release of all bonds, guarantees and sureties given in respect of the performances of the Joint Venture and the Members, the preparation and auditing of a final set of accounts, on the basis of which the final profits, or losses, attributable to the individual Members shall be determined and any necessary adjustments effected.

5 **RESOURCES OF JOINT VENTURE**

The resources to be utilised by the Joint Venture in securing and executing the Contract shall, insofar as these are to be provided directly by the Members, be as set out in the Schedules and may, from time to time, be amended by decision of the Management Committee, provided that the Member's Interests are not, except with the unanimous approval of the Members, affected thereby.

Similarly, specific areas of responsibility of the Members for the performance of work and the provision of facilities shall be as set out in the Schedules and may, from time to time, be amended by decision of the Management Committee, provided that the Members' Interest are not, except with the unanimous approval of the Members, affected thereby.

5.1 Schedule 'A' (General)

Schedule 'A' shall contain general information relating to the Joint Venture including, inter alia, the following :

1. The Employer's name and address.
 2. A brief description of the Contract and the Deliverables.
 3. The name, physical address, communications addresses and domicilium citandi et executandi of each Member and of the Joint Venture.
 4. The Members' Interests.
 5. A statement indicating whether, or not, Specific Provisions apply to the Agreement.
 6. A schedule of insurance policies which must be taken out by the Joint Venture and by the individual Members.
 7. A Schedule of sureties, indemnities and guarantees that must be furnished by the Joint Venture and by the individual Members.
8. Details of the persons, who, in the event of failure by the Members to reach agreement on the appointments of mediator and arbitrator, will nominate appointees to these positions in terms of Clauses 8.2 and 8.3.

5.2 Schedule 'B' (Financial)

Schedule 'B' shall contain information regarding the financial affairs of the Joint Venture including, inter alia, the following :

1. The working capital required by the Joint Venture and the extent to which and manner whereby this will be provided and/or guaranteed by the individual Members from time to time.
2. The banking accounts that are to be opened in the name of the Joint Venture and the manner in which these are to be operated.
3. The rates of interest that will be applicable to amounts by which Members are in debit, or credit, to the Joint Venture.
4. The names of the auditors and others, if any, who will provide auditing and accounting services to the Joint Venture.
5. The intervals at which interim financial accounts and forecasts will be prepared for approval by the Management Committee.
6. Insofar as not covered in Schedule 'C', the basis on which contributions of various types by the Members towards the work of the Joint Venture in securing, executing, managing and satisfactorily completing the Contract, will be valued.
7. The basis on which profits and/or surplus cash will, if available from time to time, be distributed to Members.
8. The basis upon which losses, if any, are to be apportioned to Members.

5.3 Schedule 'C' (Contributions by Members)

Schedule 'C' shall set out the contributions of various types, other than cash, that will be made by the individual Members towards the work and obligations of the Joint Venture and shall, as far as possible, indicate the monetary values to be placed on such contributions, which may include, inter alia, the following :

1. Staff seconded to the Joint Venture.
2. Work carried out and services provided to, or on behalf of, the Joint Venture.
3. Plant, equipment, facilities etc. made available for use by the Joint Venture.
4. Materials and goods supplied to, or on behalf of, the Joint Venture.
5. Licences, sureties, guarantees and indemnities furnished to, or on behalf of, the Joint Venture.
6. Joint Venture Disclosure form required for the Contract.

6. BREACH OF AGREEMENT

If a Member breaches any material provision of the Agreement, or delays or fails to fulfil its obligations in whole, or in part, and does not remedy the situation within fourteen calendar days of receipt of notice from the Management Committee, or another Member, to do so, the other Members shall have the right, without prejudice to any other rights arising from the default, to summarily terminate the Agreement and re-assign the defaulting Member's rights and obligations in the Joint Venture as they see fit and withhold any moneys due to the defaulting member by the Joint Venture.

Each Member shall indemnify the other Members against all losses, costs and claims which may arise against them in the event of the Agreement being terminated as a result of breach of the Agreement by the said Member.

7. INSOLVENCY OF MEMBER

Should a Member be placed in liquidation, or under judicial management, whether provisionally or finally, or propose any compromise with its creditors, the other Members shall be entitled to proceed in terms of Clause 6, as if the Member had breached the Agreement.

8. DISPUTES

8.1 Settlement

The Members shall negotiate in good faith and make every effort to settle any dispute, or claim, that may arise out of, or relate to, the Agreement.

If agreement cannot be reached, an aggrieved Member shall, if he intends to proceed further in terms of Clause 8.2 hereof, advise all other Members in writing that negotiations have failed and that he intends to refer the matter to mediation in terms of Clause 8.2.

8.2 Mediation

Not earlier than ten working days after having advised the other Members, in terms of Clause 8.1, that negotiations in regard to a dispute have failed, an aggrieved Member may require that the dispute be referred, without legal representation, to mediation by a single mediator.

The mediator shall be selected by agreement between the Members, or, failing such agreement, by the person named for this purpose in Schedule 'A'. The costs of the mediation shall be borne equally by all Members.

The mediator shall convene a hearing of the Members and may hold separate discussions with any Member and shall assist the Members in reaching a mutually acceptable settlement of their differences through means of reconciliation, interpretation, clarification, suggestion and advice. The Members shall record such agreement in writing and thereafter they shall be bound by such agreement.

The mediator is authorised to end the mediation process whenever in his opinion further efforts at mediation would not contribute to a resolution of the dispute between the Members.

8.3 Arbitration

Where a dispute or claim is not resolved by mediation, it shall be referred to arbitration by a single arbitrator to be selected by agreement between the Members or, failing agreement, to be nominated by the person named for this purpose in Schedule 'A'.

The Member requiring referral to arbitration shall notify the other Members, in writing, thereof, not later than thirty calendar days after the mediator has expressed his opinion, failing which the mediator's opinion shall be deemed to have been accepted by all Members and shall be put into effect.

Arbitration shall be conducted in accordance with the provisions of the Arbitration Act No. 42 of 1965, as amended, and in accordance with such procedure as may be agreed by the Members or, failing such agreement, in accordance with the rules for the Conduct of Arbitrations published by the Association of Arbitrators and current at the date that the arbitrator is appointed.

The decisions of the arbitrator shall be final and binding on the Members, shall be carried into immediate effect and, if necessary, be made an order of any court of competent jurisdiction.

9. DOMICILIUM

The Members choose domicilium citandi et executandi for all purposes of and in connection with the Agreement as stated in Schedule 'A'. A Member shall be entitled to change his domicilium from time to time, but such change shall be effective only on receipt of written notice of the change by all other Members.

Member No. 1

Thus done and signed at _____ this _____ day of _____ 20__

For and on behalf of _____ [Company]

by [name] _____ who warrants his authority to do so.

As witnesses 1. _____

As witnesses 2. _____

Member No. 2

Thus done and signed at _____ this _____ day of _____ 20__

For and on behalf of _____ [Company]

by [name] _____ who warrants his authority to do so.

As witnesses 1. _____

As witnesses 2. _____

Member No. 3

Thus done and signed at _____ this _____ day of _____ 20____

For and on behalf of _____ [Company]

by [name] _____ who warrants his authority to do so.

As witnesses 1. _____

As witnesses 2. _____

[Allow for additional parties as necessary].



KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

MADADENI PROVINCIAL HOSPITAL UPGRADE TO STUDENT ACCOMMODATION

ANNEXURE 6

Health & Safety Specification



KWAZULU-NATAL PROVINCE

HEALTH

REPUBLIC OF SOUTH AFRICA

Occupational Health and Safety Specification

Madadeni Provincial Hospital Upgrade to

Student Accommodation

1. Introduction

The Department of Health Kwa Zulu Natal enters into contracts with Contractors for This document describes the requirements of compliance to which the Principal Contractor/Contractor is to adhere in relation to the scope of works. This document defines the minimum management requirement that is to be implemented by the Principal Contractor for the management of Health and Safety on the Health care facility.

The aim of this document is to present the health and safety aspects that need to be controlled and managed on this contract. The client reserves the right to make changes as and when the Client deems fit to address issues of Occupational Health & Safety (OHS) Compliance. The Client will not entertain any claim of any nature whatsoever which arises as a result of costs incurred or delays being experienced due to the Contractor not complying with the requirements of this document or any other applicable legislative requirements imposed on the contractor.

The Principal Contractor will be required to submit a Health and Safety File for approval prior to commencement of work. Arrangements for such approval shall be made with the OHS Department. The Principal Contractor shall submit proof that its appointed contractors Safety file has been approved.

2. Definitions & Abbreviations

2.1 “**Client**” means KZN Department of Health

2.2 “**CR**” refers to the Construction Regulations 2014

2.3 “**OHS**” means Occupational Health and Safety

2.4 “**DoL**” refers to the Department of Labour

2.5 “**DOH**” refers to the Department of Health

2.6 “**NIHL**” refers to the Noise Induced Hearing Loss Regulations

2.7 “**HCS**” refers to the Hazardous Chemical Substances Regulations

2.8 “**GSR**” refers to the General Safety Regulations

2.9 “**GAR**” refers to the General Administrative Regulations

2.10 “**FR**” refers to Facilities Regulations

2.11 “**PPE**” means Personal Protective Equipment

2.12 “**MSDS**” means Material Safety Data Sheets

2.13 “**EIR**” refers to the Electrical Installations regulations

2.14 “**EMR**” refers to Electrical Machinery Regulations

2.15 “**ERW**” refers to Environmental Regulations for Workplaces

2.16 **Principal Contractor** means an employer appointed by a Client to perform Construction Work

2.17 **Construction Work** means any work in connection with:-

(a) the construction, erection, alteration, renovation, repair, demolition or dismantling of a addition to a building or any similar structure or;

(b) the construction, erection, maintenance, demolition or dismantling of any bridge, dam, road, railway, runway, sewer or water reticulation system, or the moving of earth, clearing of land, the making of excavation, pilling, or any similar civil engineering structure or type of work.

2.18 Construction Manager means a competent person responsible for the management of the physical construction process and the co-ordination, administration and management of resources on a construction site

2.19 Construction Supervisor means a competent person responsible for supervising construction activities on a construction site

2.20 Competent Person means a person who –

(a) Has in respect of the work or task to be performed the required knowledge, training and experience and where applicable, qualifications, specific to that work or task. Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2000 (Act No. 67 of 2000), those qualifications and training must be regarded as the required qualifications and training, and

(b) Is familiar with the Act and with the applicable regulations made under the Act

2.21 OHS Plan means a site, activity or project specific documented plan in accordance with the Client's Health & Safety Specification

2.22 Health & safety File means a file or other record containing information in writing required by Construction Regulations 2014.

2.243 Hazard Identification and Risk Assessment and Risk Control (HIRA) means a documented plan, which identifies hazards, assesses the risks and detailing the control measures and safe working procedures, which are to be used to mitigate and control the occurrence of hazards and risks during construction or operation phases.

2.24 The Act means, unless the context indicates otherwise, the Occupational Health and Safety Act, 85 of 1993 and Construction Regulations 2014 promulgated there under, (OHSA).

2.25 Hazard means a source of or exposure to danger

2.26 Risk means the probability or likelihood that a hazard can result in injury or damage.

2.27 Hazardous Chemical Substance (HCS) means any toxic, harmful, corrosive, irritant or asphyxiant substance, or a mixture or substances, for which an occupational exposure limit

is prescribed, or an occupational exposure limit is not prescribed, but which creates a hazard to health

2.28 Construction Plant encompasses all types of plant including but not limiting to, cranes, piling frames, boring machines, excavators, dewatering equipment and road vehicles with or without lifting equipment.

2.29 Fall prevention equipment means equipment used to prevent persons, tools or machinery from falling from a "fall risk" position, including personal protective equipment, body harness, body belts, lanyards, lifelines or physical equipment, guardrails, screens, barricades, anchorages or similar equipment.

2.30 Fall risk means any potential exposure to falling either from, off or into.

2.31 Fall protection plan means a documented plan which includes:

- a) all risks relating from a fall risk position, considering the nature of work undertaken;
- b) the procedures and methods to be applied in order to eliminate the risk; and
- c) a rescue plan and procedures

3.32 Scaffold means a temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both

3.33. Occupational Health Practitioner refers to either Doctors or Nurses with the following requirements:

Doctors

- (a) Registered and in good standing with the Health Professions Council of South Africa (HPCSA)
- (b) has a tertiary qualification in Occupational Health or Medicine which is registered as an additional qualification with HPCSA or
- (c) be registered as a specialist in Occupational Medicine with HPCSA

Nurses

- (a) registered and in good standing with the South African Nursing Council (SANC) and

(b) have a tertiary qualification in Occupational Health Nursing that is recognised and registered with SANC

3.34 dead means at or about zero potential and isolated from any live system;

3.35 earthed means connected to the general mass of earth in such a manner as will ensure at all times an immediate safe discharge of electrical energy;

3.36 "live" or "alive" means electrically charged

3.37 portable electric tool means any electrically operated implement, with the exception of ordinary household electrical appliances, which is designed for use with-

(a) a flexible cord at the supply end and which is intended for use by hand and which is to be carried by hand at the place of work; or

(b) a flexible cable at the supply end and which is intended for use by hand and which is to be moved by hand at the place of work;

3.38 electrical contractor means a person who undertakes to perform electrical installation work on behalf of any other person, but exclude an employee of such first-mentioned person

3.39 electrical installation means any machinery, in or on any premises, used for the transmission of electricity from a point of control to a point of consumption anywhere on the premises, including any article forming part of such an electrical installation irrespective of whether or not it is part of the electrical circuit, but excluding

(a) any machinery of the supplier related to the supply of electricity on the premises;

(b) any machinery which transmits electrical energy in communication, control circuits, television or radio circuits

(c) an electrical installation on a vehicle, vessel, train or aircraft; and

(d) control circuits of 50 V or less between different parts of machinery or system components, forming a unit, that are separately installed and derived from an independent source or an isolating transformer;

3.40 installation electrician means a person who has been registered as an installation electrician in terms of regulation 11 (2) for the verification and certification of the construction, testing and inspection of any electrical installation, excluding specialised electrical installations;

3.41 installation work means:-

(a) the installation, extension, modification or repair of an electrical installation;

(b) the connection of machinery at the supply terminals of such machinery; or

(e) the inspection, testing and verification of electrical installations for the purpose of issuing a certificate of compliance;

3.42 master installation electrician means a person who has been registered as a master installation electrician in terms of regulation 11 (2) for the verification and certification of the construction, testing and inspection of any electrical installation;

3.43 point of supply means the point at which electricity is supplied to any premises by a supplier;

3. Client Requirements

3.1 Leadership and Commitment

The Contractor acknowledges the KZN Department of Health's strong commitment to Health and Safety and the Contractor affirms that it has a written Health and Safety Policy, and is actively supported and endorsed by the Contractor's management. The Contractor represents that its written policy is widely disseminated and understood among its employees, and that its policy includes a description of the Contractor's organization, procedures and methods of communication to and from personnel. The Contractor must provide copies of its policy and policy statement to Department of Health (DOH).

3.2 Legal Requirements and Regulations for Health and Safety

The Contractor warrants that it is familiar with the contents and implications of the applicable Legislation; codes of practice, guidelines and standards applicable to the services to be provided. The Act and the Regulations, where applicable, require development and implementation of Work Method Statements for a range of high-risk activities, which, where applicable, the Contractor must develop and implement. The Contractor must ensure that its personnel and its subcontractor's personnel have been informed of all such laws, Acts, regulations, codes of practice, guidelines and standards.

3.3 Contractors' General Requirements for Health and Safety

The Contractor is solely responsible for carrying out the work under the Contract having the highest regard for the health and safety of its employees, the KZN Department of Health's employees and persons at or in the vicinity of the Site, the Works, temporary work, materials, the property of third parties and any purpose relating to the Contractor carrying out its obligations under this Contract.

The Contractor must initiate and maintain safety precautions and programs to conform to all applicable Health and Safety laws or other requirements, including requirements of any applicable government instrumentality and DOH institutions site requirements.

The Contractor must, at its own cost, erect and maintain safeguards for the protection of workers and the public. The Contractor must manage all reasonably foreseeable hazards created by performance of the work.

The Contractor must:

- Provide all things and take all measures necessary for maintaining proper personal hygiene, ensuring safety of persons and property and protecting the environment at or near the Site
- Avoid unnecessary interference with the passage of people and property at or near the Site
- Prevent nuisance and excessive noises and unreasonable disturbances in performing the Services
- Be responsible for the adequacy, stability and safety of all of its site operations.
- Costs for the above are borne by the Contractor
- The Contractor must comply and is responsible for ensuring that all of its Sub-contractors comply with the relevant legislation(s) and statutory regulations for health and safety, the KZN Department of Health's Health & Safety requirements included in the Contract and other document pertaining to health & safety contained in the Program Health & Safety Management System and include standards, policies, procedures, guidelines and safe work instructions
- The contractor must appoint a Competent Safety Officer who will ensure that OHS Act and its regulations are implemented.
- The appointment of a Safety Officer must be approved by DOH
- The Safety Officer must possess a National Diploma in Environmental Health/Safety Management or SAMTRAC and have at least 2years experience.

3.4 Contractor's Health and Safety Management Plan

The Contractor must prepare, implement and administer the Contractor's Health and Safety Management Plan. The Plan is in writing and must be forwarded prior to mobilisation to the site for work under the Contract to the KZN Department of Health's Safety Department for review. The Health and Safety Management Plan must comply with this Contract including Site Rules & Requirements, and applicable law relating to workplace health, safety and environmental standards. Any proposed amendments or revisions to the Contractor's Safety Management Plan are submitted to DOH for acceptance.

The Health and Safety Management Plan must provide a systematic method of managing hazards according to the risk priority and must include all mobilisation and site set-up activities. The Plan will be audited for completeness by the KZN Department of Health.

The contractor shall comply with the requirements of CR 7

The Plan must be presented and accepted by DOH BEFORE permission will be granted to the Contractor to mobilise to site

3.5 Legal & Site-Specific Requirements

The Contractor shall develop, implement and administer Health & Safety Plan. The plan shall be in writing and shall be submitted to DOH within 7 days of the contract being awarded.

The plan shall demonstrate management's commitment to safety and include, but not be limited to, the following minimum auditable elements:

- The Contractors' Safety Policy.
- How safety responsibilities are assigned to different roles within the organisation. Identification of role of Safety Coordinator, and on-site managers
- Selection, placement and training procedures, including induction and ongoing training in 'Basic Safe Work' and Occupational Health & Safety training for newly hired or promoted supervisors.
- Occupational Health & Safety communications and meetings, including daily safe task instructions and project safety meetings.
- Assessment of sub-contractors and Service Providers, including requirements for Health & Safety Plans.
- Safety awareness.
- Nomination of personnel to carry out safety inspections.
- Contractor senior management involvement
- Rules and regulations including safety procedures the Contractor has in place for recurring work activities
- Personal protective equipment rules.

- Control of dangerous and hazardous substances
- System of hazard identification and risk control, such as Risk assessments, Daily Safe Task Instructions and communication.
- Verification procedures including
- Daily site safety inspections and audits
- Inspection of plant, tools and equipment prior to introduction to site and at least monthly thereafter
- Accident/incident reporting, recording, investigation and analysis, which ensure that corrective action, are taken and this action is communicated to report initiators
- Evacuation and emergency planning
- Rehabilitation procedures that encourage an early return to work
- Record keeping, including details of what is kept and for how long

3.5.1 Hazard Identification, Risk Assessment and Risk Control

- The development of a work scope and activity risk profile identifying and considering, safety, health and environmental hazards and exposures.
- Controls to manage risks identified within the risk profile will be formalised and implemented
- Personal Protection Equipment
- The hazard identification and risk assessment process for specific operations and activities and for new activities identified after the development of the project/work scope and activity risk profile.
- The process to be used to review the effectiveness of risk controls
- Workplace hazard inspections
- The implementation of a safety observation and coaching process conducted as a minimum by persons in leadership roles
- Method by which daily activities will be assessed for hazards and controls defined before work commences

- Contractor will carry out inspections and maintain requests of the identification of and implementation of inspection and maintenance controls for plant, mobile plant, equipment and tools requiring formal management.

3.5.2 Risk Assessment

- The principal contractor must, before the commencement of any work and during such work, have risk assessments performed by a competent person appointed in written.

The risk assessment should include-

- (a) the identification of risks and hazards to which persons may be exposed to
- (b) an analysis and evaluation of the risks and hazards identified based on a documented method
- (c) a documented plan and applicable safe work procedures to mitigate reduce or control the risks that have been identified
- (d) a monitoring plan and
- (e) a review plan

- Furthermore, the contractor shall conduct job/task specific risk assessment. Communication of the risk assessments shall be kept in the OHS file.
- Risk assessment must be performed by a trained risk assessor who has been appointed in writing.
- The principal contractor shall comply with the requirements of CR 9

3.5.3 Task Specific Risk Assessment

Prior to the commencement of each work activity, a Task Specific Risk Assessment (HIRA) is completed; documented and submitted to KZN Department of Health for approval prior to the task commencing. The purpose of the HIRA is to identify all potential hazards associated with the Work and the Work environment, assess the risk these hazards present and then to provide risk control action that deals with those hazards, as well as providing to the workforce involved in the particular work activity, details of any hazards and the proposed controls.

The Task Specific Risk Assessment must:

- Describe the operation to be performed in the sequence of the basic job steps.
- Identify the hazards or potential hazards at each step.
- Identify the possible consequences for each hazard at each step.
- Assess the Initial Risk Score that each hazard presents (Probability x Severity x Frequency), the total score will be used to identify the Risk Ranking/Priority Factor.
- Once control measures have been considered and implemented, a Revised Risk Score must be allocated to each hazard.
- Identify the Site Rules that apply.
- Describe how the hazard is controlled such that the residual risk is as low as reasonably practicable and is acceptable to the work crew.
- Identify the related Work Instruction if appropriate.
- Be reviewed prior to each shift.
- Be acknowledged by way of signature of all personnel involved in the work activity

3.5.4 Safety Method Statements

- The Contractor must submit Safety Method Statements to the KZN Department of Health's nominated Representative for approval prior to the task commencing.
- The Task Items listed in the Safety Method Statement must tie up with the task items being assessed in the Task Specific Risk Assessment document.
- The Safety Method Statement must detail in a step by step and methodical manner how the task is to be done from beginning to the end and must indicate what tools/equipment will be used at each stage and/or how the work area is to be accessed.

3.5.5 Hazardous Materials

- The Contractor must set out its policy for the use, transportation, handling and storage of fuel and hazardous materials taking into account the legislative requirements. The Contractor must ensure that all hazardous materials and waste

products are disposed of in accordance with applicable laws and regulations and any procedures published by DOH or in the absence of any relevant law, regulation or procedures, in accordance with sound safe practice.

3.5.6 Demolition

- The principal contractor must appoint a competent in writing to supervise and control all demolition works on site
- Prior to demolition works; s detailed structural engineering survey of the structure to be demolished must be carried out by a competent person and a method statement must be developed and followed
- During demolition; the structural integrity must be checked at intervals determined in the method statement
- The contractor must comply with the requirements of CR 14

3.5.7 Incident Management

- The principal contractor must appoint a competent incident investigator in writing.
- Incident management plan must be developed and implemented by the principal contractor
- All incidents must be investigated and recorded
- Reportable incidents must be reported to the Department of Labour
- Incidents must be reported to DOH within 24 hours of occurrence
- An incident register must be kept on site.
- Incident investigation report inclusive of corrective measures must be submitted to DOH

3.5.8 Emergency Preparedness and Procedures

- The principal contractor must develop an emergency procedure
- The emergency procedure must have; but not limited to:
 - A detailed response procedure;
 - List of key personnel
 - Details of emergency services

Steps to be taken in the event of each and every specific type of emergency

- The emergency procedure must be communicated to all employees
- Emergency numbers must be known to all employees

3.5.9 First Aid Equipment

- The principal contractor must appoint first aider in writing
- The appointed first aider must be in possession of First Aid Level 2 certificate.
- The contractor must provide his own first aid box

3.5.10 Unsafe Acts and Conditions

- The Contractor must implement a system to recognise, correct, and report unsafe acts and conditions associated with all Site activities.

3.5.11 Occupational Health & Infection control

- The contract may expose employees to biological agents; contractors must ensure that an adequate risk assessment is prepared and identifies the biological agents and controls thereof.
- Appropriate PPE must be used at all times

3.5.12 Extreme weather conditions

- If weather conditions pose a threat to Health & Safety of employees, be it extreme heat, cold, lightening or any weather condition, the Principal must apply appropriate safety measures. For hot environments; cool portable water shall be provided.

3.5.13 Medical Certificates of Fitness

- Prior to commencement of works; the principal contractor must submit valid medical certificates of fitness for all employees
- DOH will only accept Medical certificates of fitness obtained from an authorised Occupational health Practitioner
- A procedure to cater for employees with limitations must be developed and implemented by the contractor.
- Employees without valid medical certificates will not be allowed on site.

3.5.14 Plant and Equipment

- The contractor must implement and comply with OH&S Act - Electrical Machinery Reg. 9, Driven Machinery Reg. 1 – 20, Electrical Machinery Regulations and Electrical Installation Regulations.
- The Contractor must supply, at his cost, all items of plant and equipment necessary to perform the work and must maintain all items in good order and condition.
- Should any plant or equipment become inoperable for a period considered to be harmful to the progress of the work, the Contractor, must remove the unserviceable plant or equipment and replace it with similar serviceable plant or equipment at no cost to KZN Department of Health.
- No item of plant or equipment delivered to site for this Contract is removed from the site prior to the completion of the Contract without the written approval of DOH.
- DOH reserves the right to inspect items of plant or equipment brought to site by the Contractor for use on this Contract. Should DOH Representative has the opinion that any item is inadequate, faulty, unsafe or in any other way unsuitable for the safe and satisfactory execution of the work for which it is intended, He/She must advise the Contractor in writing and the Contractor must forthwith remove the item from the site and replace it with a safe and adequate substitute.

3.5.15 Personnel Protective Equipment/Clothing (PPE)

- The contractor must provide suitable and adequate PPE to all his/her employees
- PPE must be issued to all workers free of charge and a record of issuing must be kept
- Training must be provided to all employees to ensure they know how to use and maintain their PPE
- Training should include but not limited to: Cleaning of PPE, Hygiene, Correctly Putting PPE on, Inspection of PPE, Health Risks associated with the task,
- The contractor must comply with the requirements of General Safety Regulations

3.5.16 Working on Live Electrical Equipment / Sub-Station

- The Contractor may not allow any work on live electrical equipment!

3.5.17 Elevated Work

- The Contractor must submit a fall protection and rescue plan to DOH for approval, before any elevated work commence
- Parachute type harness with shock absorber and double lanyard to be provided for all elevated work
- Ensure that all tools in elevated positions is attached to lanyards and be attached to either the person or structure
- Equipment in elevated positions must be tied back to the structure
- There must be no loose items in elevated positions.
- Overhead work will only be allowed only if A the area below is barricaded in accordance with DOH barricading requirements.
- The contractor must implement and comply with Construction Regulations 8

3.5.18 Barricading requirements

- All openings and edges must be barricaded with solid barricading to withstand an impact of at least 100kg
- Only solid barricading covered with Orange Netting and or DOH approved equivalent barricading is allowed.
- Solid barriers to prevent persons falling into them must protect openings in floors, stairwells, staircases, open-sided buildings and any structure in the course of erection, where dangerous openings exist
- Contractors must pre-plan the delivery of floor grating, stair treads, landings and handrails to ensure safe access and protection for persons working on structures
- Barricading must be tagged, placed on register, maintained and inspected daily – The owner of the barricade's name and mobile number must appear on the tag
- All handrails and fencing must comply with DOH Standards.
- The contractor must comply with the requirements of General Safety Regulation 13 (l)

Note: Danger tape will not be accepted as barricading!

3.5.19 Working in Existing Operations

- Work must be carried out such that no interference is caused.
- Any work which requires section of the Plant to be taken out of operation with resultant interruption to production and/or other activities must be carried out in the absolute minimum of time and be on the basis of the Contractor working around the clock (within legal parameters) for the duration of such work. The times when work of this nature can be carried out must be arranged with DOH

3.5.20 Lock-out Procedures

- In operating areas lock out procedures must follow DOH I procedures.
- There must be a separate set of procedures that cover the requirements for lockout, commissioning, start-up and hand over of the completed works.

To ensure the safety of persons working in operating plant areas, the Contractor must ensure:

Lock-out procedure compliance

Instruction to all workmen concerned in its application and implementation

Daily checking of permits

Distribution of information and communication of any other permit system required

3.5.21 Notification of Construction Work

- The principal contractor must notify the department of Labour in writing 7 days before commencement of construction works.

3.5.22 Fall Protection

- The Principal contractor must designate a competent person to prepare a fall protection plan
- The principal contractor must implement the fall protection plan and amend when necessary and
- Ensure that there is continued adherence to the fall protection plan

Fall protection plan must include:

- A risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location
- The process of evaluation of employee's medical fitness necessary to work at a fall risk position and records thereof
- A programme for training of employees working from fall risk positions and records thereof
- The procedure addressing the inspection; testing and maintenance of all fall protection equipment
- A rescue plan detailing the necessary procedure; personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident.

- The site manager must be in possession of the most recently updated version of the fall protection plan

The Principal contractor must ensure that

- All unprotected openings on the floors; edges; slabs; hatchways and stairways are adequately guarded; fenced or barricaded or that a similar means is used to safeguard any person from falling through such opening;
- No person/s is permitted to work in a fall risk position unless the work is performed safely as above
- Fall prevention and arrest equipment are approved as suitable and of sufficient strength for the purpose for which they are being used; with regards to the load including any person; they are intended to bear;
- Securely attached to a structure or plant and the structure or plant means of attachment thereto are suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any other person who could fall and
- Fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment.
- The contractor must comply with the requirements of CR 10

3.5.23 Scaffolding

- The contractor must appoint a competent person to supervise scaffold (scaffold Supervisor)
- The contractor must appoint a competent person to erect scaffold (Scaffold erector) these must be 2 different persons
- The contractor must ensure that scaffolds are tagged accordingly
- The contractor must comply with the requirements of CR 16

3.5.24 Vehicles and mobile plant

- The contractor must ensure that vehicles and mobile plants comply with the requirements of CR 23
- Vehicles and mobile plants must be inspected daily before use and records thereof must be kept
- Competent personnel must be appointed to use and manage such

3.5.25 Housekeeping and general safeguarding on site

- The contractor must comply with the requirements of Environmental Regulations for Workplaces (ERW) and CR 27
- The contractor must ensure continuous housekeeping on site
- Accumulated waste must be removed regularly
- The site must be kept neat and clean at all times

3.5.26 Stacking and storage on site

- The contractor must appoint in writing a competent stacking storage supervisor
- The contractor must comply with the requirements of GSR and CR 28

3.5.27 Fire precautions on site

- The contractor must minimise fire risks on site
- The contractor must comply with the requirements of ERW and CR 29

3.5.26 Employee Facilities on site

- The contractor must provide adequate facilities on site i.e. toilets; eating areas; changing areas and showers etc.
- The contractor must comply with the requirements of CR 30

3.5.27 Portable electric tools

- No person shall use or permit the use of a portable electric tool with an operating voltage that exceeds 50 V to earth unless-

(a) it is connected to a source of electrical energy incorporating an earth leakage protection device, the construction of which meets the requirements of the relevant health and safety standard incorporated into these Regulations under section 44 of the Act; or

(b) it is connected to a source of electrical energy through the interposition between each tool and the source of an individually double-wound isolating transformer, the secondary winding of which is not earthed at any point and the construction of which meets the requirements of the relevant health and safety standard incorporated into these Regulations under section 44 of the Act; or

(c) it is connected to a source of high frequency electrical energy derived from a generator which is used solely for supplying energy to such portable electric tool and which arrangement is approved by the chief inspector; or

(d) it is clearly marked that it is constructed with double or reinforced insulation.

- The contractor must comply with the requirements of EMR 10

3.5.28 Portable electric lights

- No employer or user shall use or permit the use of a portable light where the operating voltage exceeds 50 V unless –

{a} it is fitted with a substantial handle which is made of non-hygroscopic, non-conducting material;

{b} all live metal parts or parts which may become live owing to a faulty circuit are completely protected against accidental contact.

(c) the lamp is protected by means of a substantial guard firmly fixed to the insulated handle; and

(d) the cable lead-in is such that the insulation can withstand rough use

- The contractor must comply with the requirements of EMR 11

4. Training and Competency

- Prior to the commencement of the work, the Contractor must provide current documentation to the satisfaction of DOH verifying that the Contractor's personnel are competent and have the appropriate qualifications, job skills and training as required by this Contract and applicable laws.
- The Contractor must ensure that all his employees and his Sub-Contractors' employees working on the site are adequately trained in the type of work to be performed, are trained in relevant procedures and have the appropriate qualifications, certificates and are under competent supervision. Records are to be maintained on site.
- The Principal Contractor and all contract employees are holders of current certificates or licenses, where the operation being performed requires such or applicable industry standard where legislation does not prescribe or have registered courses to meet the requirements.

4.1 Induction in Health and Safety

- The Contractor must ensure that no employee of the Contractor or its subcontractors, including transport and delivery Contractors entering the site delivering materials and/or equipment, must proceed to enter the Site or any operations area until they have received all training required under applicable laws and regulations, including, but not limited to, work activity inductions and the KZN Department of Health's Site-specific induction.
- The Contractor must also prepare and present to all its employees its own Contractor Induction, explaining the Contractor's Safety Management Plan, the Contractor's Rules, the obligations imposed by the Occupational Health and Safety Act and Regulations.
- The contractor must comply with: OH&S Act - Section 8

5. Smoking

- The Contractor must not permit smoking at the Site except within designated smoking areas.

6. Intoxicating Liquor or Drugs

- The contractor must implement and comply with OH&S Act – General Administrative Regulation 10
- Any person found on the site or attempting to enter site, in possession of or consuming intoxicating liquor or illegal drugs or considered unfit for work from the apparent influence of intoxicating liquor or illegal drugs or prescription drugs, is removed from the site.

7. Asbestos

As per section 21 of Asbestos regulation, a contractor must ensure that demolishing or removal of asbestos sheeting is properly managed and conducted by an approved inspection authority. The follow regulations stated below must be adhered to:

- before the commencement of that work, take steps to ensure that demolition work is carried out by a person who is a registered asbestos contractor;
- all asbestos materials likely to become airborne are identified;

- a plan of work is submitted for approval to an approved asbestos inspection authority;
- have a copy of the approved plan of that work, which has been signed by the approved asbestos inspection authority, the employer and, the mandatory of the employer or self-employed person;
- Contractor to submit a plan to the department of Labour at least 14 days prior to commencement of such demolition work;
- all asbestos and materials containing asbestos are handled and disposed of correctly;
- all persons exposed to or likely to be exposed to asbestos are issued with appropriate personal protective equipment and that such equipment is used properly;
- the premises, structure or area are thoroughly checked to ensure that all asbestos waste has been removed.
- Asbestos waste to always be covered and waste bin labelled accordingly
- Occupational Hygiene surveys to be conducted prior, during and after work to monitor asbestos levels in a working environment. These records should be kept for a period of 40 years as per requirement of the regulation.
- Record of inventory should be kept to monitor movement of removed and disposed asbestos.
- Decontamination of areas must be implemented accordingly

8. Housekeeping

- The contractor must implement and comply with Construction Reg. 27
- The Contractor must maintain all work areas in a tidy state, free of debris and rubbish.
- The Contractor must dispose of all debris, rubbish, spoil and hazardous waste off site, outside KZN Department of Health's property in a designated and authorised area or facility. The Contractor should make itself aware of the KZN Department of Health's waste management plan and collection and disposal arrangements and align its waste management program accordingly.

- In cases where an inadequate standard of housekeeping has developed and compromised safety and cleanliness, DOH has the right to instruct the Contractor to cease work until the area has been tidied up and made safe.
- The Contractor must carry out regular safety/housekeeping inspections at least weekly to ensure maintenance of satisfactory standards. The Contractor must document the results of each inspection and must maintain records for viewing by DOH.

9. Management of COvid-19

9.1 Covid- 19 Documentation

The principal contractor shall develop a policy on COvid-19; signed by CEO

Covid-19 prevention and management plan must be developed

Conduct a risk assessment to determine exposure to Covid-19

Daily Safety Task Instructions (DSTI's) shall include Covid-19.

9.2 Hand washing facilities

Construction sites must be equipped with hand washing facilities at the usual welfare facilities.

Ensure soap and fresh water is readily available and kept topped up at all times.

Ensure regular cleaning of hand wash facilities and provide adequate bin for disposal of hand paper towels with regular disposal.

Hand washing techniques posters shall be posted around the hand washing facilities

Hand sanitising agents must also be placed at strategic areas

9.3 Medical Certificates of Fitness

Principal contractor shall keep copies of employee's medical certificates of fitness on site safety file.

Having studied the medical certificates of all employees; the principal contractor must ensure that high risk employees are managed accordingly i.e. employees with underlying medical conditions

9.4 Screening

The principal contractor must ensure that all personnel accessing their sites are screened.

All cases referred for testing shall be reported to relevant Department of Health's project manager.

3.5 Travel to site

The principal contractor shall arrange safe transportation of employees to and from site.

Ensure that vehicles are disinfected on daily basis.

Where single occupancy of vehicle is not practicable; employees shall sit as far apart as the vehicle allows; and all windows must be kept open.

9.5 Eating Areas

The principal contractor must ensure that there are dedicated eating areas for employees.

Ensure that eating areas are kept in a hygienic condition and disinfected after use.

The contractor shall stagger breaking times to reduce congestion and contact.

Employees shall be encouraged to follow the acceptable social distancing measures and seating arrangements must be as such.

Hand washing facilities and or sanitisers must be provided in these areas.

9.6 Changing facilities

The principal contractor shall introduce staggered start and finish times to reduce congestion and contact at all times.

Changing facilities shall be cleaned and disinfected regularly.

Based on the size of each facility; the contractor shall determine how many people can use a changing facility at any one time to maintain the acceptable distance

9.7 Avoiding close working

There will be circumstances where it is not possible or safe for employees to distance themselves from each other by the acceptable distance.

Principal contractor shall ensure that where the acceptable distance is not practicable:-

- employees have no symptoms of Covid-19;
- allow only 1 person per m²
- PPE is worn correctly and is in line with risk assessment and
- Supervision is maintained throughout the activity.

9.8 Deliveries

All personnel delivering equipment and material to site shall be subjected to screening.

Equipment and materials delivered on site must be disinfected at a designated decontamination area to avoid transition of the virus.

9.9 Personal Protective & Equipment Clothing

Personal protective equipment & clothing refers to a variety of barriers, used alone or in combination, to protect against hazardous agents in the environment.

The principal contractor shall ensure that his employees and sub-contractor employees are issued with suitable PPE and that PPE is worn at all times and in a correct manner

Ensure that used PPE is disposed of in an acceptable manner.

9.10 Training & awareness

The principal contractor shall ensure continuous training and awareness on Covid-19 and measures that can be used to minimise the spread

Training to include but not limited to:-

Cough etiquette; social distancing; Hand washing; Screening station;

Correct use and disposal of PPE; Reporting of symptoms to the employer

9.11 Cleaning Procedures

The principal contractor shall establish adequate cleaning and disinfection procedures and intervals thereof.

This includes but limited to:-

- cleaning to prevent contamination
- taps and hand washing facilities
- toilet flush and seats
- door handles
- handrails on staircases and corridors
- lift and hoist controls
- machinery and equipment controls
- keyboards; photocopies and other office equipment

10. Fundamental health and safety requirements

Before any work commences, proof of and the following non-negotiable deliverables are required:

- Incident investigation training by Construction Manager and or Safety Officer
- Letter of good standing with the Workman's Compensation Commissioner
- Legal liability training of all Supervisors and Construction Managers
- Original of the notification of construction work stamped by the Department of Labour
- Public Liability Insurance
- Competency training certificates of people to execute the job
- Method statements for work to be conducted
- A Baseline Risk Assessment

- Risk Assessments for every Job/Task
- Signed legal appointments as required by legislation
- Contractors' Safety Officer CV and competency certificates
- Health and Safety Management Plan
- Health and Safety file
- All equipment to be on a current register, backed up by relevant test certificates
- A Medical fitness certificate for each employee with Annexure 3 completed per employee
- Proof of induction (Contractor induction training)

11. OMISSIONS FROM HEALTH SAFETY AND REQUIREMENTS SPECIFICATION

- By drawing up this OHS specification, DOH has endeavoured to address the most critical aspects relating to OHS issues in order to assist the contractor in adequately providing for the health and safety of employees on site. Should DOH not have addressed all SHE/Q aspects pertaining to the work that is tendered for, the contractor needs to include it in the SHE plan and inform DOH of such issues when submitting.

Contractor's Acceptance & Acknowledgement of the Health & Safety Specification:

I, _____ (print name in full), the undersigned responsible person (Contractors 16.1/16.2 Appointee) for: _____ (Company Name)

declare that I have read, understood and accept the responsibilities and requirements of this Health & Safety Specification for the project: **Madadeni Provincial Hospital Upgrades to Student Accommodation** will ensure that this Health & Safety Specification is communicated to the relevant parties so that the requirements hereto can be complied with.

Contractor's Responsible Person
(16.1/ 16.2 Appointee)

Date