

**THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF EDUCATION SCIENCE AND TECHNOLOGY  
(MoEST)**



**HIGHER EDUCATION FOR ECONOMIC TRANSFORMATION  
PROJECT (HEET)**

**ARDHI UNIVERSITY**



**PROVISION OF CONSULTANCY SERVICES FOR DESIGN REVIEW AND  
CONSTRUCTION SUPERVISION OF BUILDINGS AT ARDHI UNIVERSITY – MAIN  
CAMPUS**

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**TERMS OF REFERENCE**

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**SEPTEMBER, 2022**

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## **TERMS OF REFERENCE (TOR)**

### **PROVISION OF CONSULTANCY SERVICES FOR DESIGN REVIEW AND SUPERVISION OF CONSTRUCTION OF BUILDINGS AT ARDHI UNIVERSITY – MAIN CAMPUS**

#### **1.0. BACKGROUND**

The Government of United Republic of Tanzania has received funds from the World Bank under the Higher Education for Economic Transformation (HEET) Project under the Ministry of Education Science and Technology (MoEST). This is a five (5) years project from 2021/22 to 2025/26. Ardhi University (ARU) is one of the public institutions benefiting from the project, directing the funds to development of teaching and learning infrastructure. It is intended that part of the funds will be used to cover eligible payments for procuring consultancy services for reviewing the design and supervision of construction of new teaching and learning facilities at Ardhi University.

#### **2.0. OBJECTIVE OF THE ASSIGNMENT**

##### **2.1. General Objective**

The general objective of the assignment is to carry out design review of drawings and supervision for construction of teaching and learning facilities that include Studio, Multipurpose laboratory, Workshops for Priority Degree and Multipurpose Classrooms as shown in Table 1 in this document. The objective is to enhance an effort of having modern infrastructure and environmental-friendly teaching and learning environment to students, members of staff, and other stakeholders.

##### **2.2 Specific Objectives**

###### **2.2.1 Review Available Documents Related to the Project as Provided by the Client**

The consultant shall review the designs and all relevant documents required for accomplishment of the project. The consultant shall provide approved construction detailed drawings Architectural, Structural, and Services (Electrical, Plumbing, Firefighting Infrastructure, ICT and Security System) in order to acquaint with the design and advice of any enhancement in terms of construction methodologies, green building and project implementation. Furthermore, the consultant will review tender documents in consultation of available specific reports and

documents. Specific reports and documents such as Master plan, ESIA report and any other related project document to be reviewed for the purpose of identifying any omissions/ additions, which compromise or supplement the completeness or consistency of the design together with the review of Bills of Quantities, and Specifications.

### ***2.2.2 Supervision of Construction***

The Consultant shall be fully responsible for supervision of the construction works from beginning (site handover) to the successful completion (practical completion) including the defect liability period (final completion) as specified in the contract.

## **2.3. Client brief and scope of the technical services**

### ***2.3.1: Scope of the Assignment***

The Assignment will be design review of drawings and construction supervision for the following facilities as listed in Table 1.

**Table 1: List of Facilities to be constructed**

<b>S/No.</b>	<b>Building Facility</b>	<b>Functions within Building</b>
1	Studio Building	Studio rooms
		Offices
		Model room
2	Multipurpose Laboratory	Geotechnical survey laboratory
		Transportation Laboratory
		Physics Laboratory
		Fluid Mechanics Laboratory
		Geodesy and Geomatics Laboratory
		Department server room
		Biotechnology and Oil and Gas Analytical Laboratory
		GIS and Remote sensing Laboratory
3	Workshops for Priority Degree	Electronics Workshop
		Carpentry Workshop
		Civil and Material Workshop
		Welding Workshop
		Masonry Workshop
		Electrical workshop
		Plumbing workshop
4	Multipurpose Classroom	Lecture Halls
		Lecture Theatre

S/No.	Building Facility	Functions within Building
		Offices

## 2.3.2 TASKS/ACTIVITIES OF THE CONSULTING ASSIGNMENT

The general assignment shall comprise consulting services in **Architectural, Structural/Civil Engineering, Services Engineering and Quantity Surveying** disciplines. The works involved is mainly expected to be design review of drawings and construction supervision of the above mentioned projects. The team is advised to visit and familiarize with site and obtaining all necessary information. The Team will prepare and submit (but not limited to) the following: -

### 2.3.2.1 Review Design of the Building Facilities

The Team will review and thereafter adopt the design drawings and all associated documents. The reviewed and updated **Designs/Drawings** and **Bills of Quantities** produced shall be a **copyright property** of the Client/Employer. The review will include:

- (i) The Consultant to review the Environmental and Social Impact Assessment (ESIA) to ensure that the prepared designs comply with applicable Tanzania environmental laws and regulations, and site-specific Environmental and Social Management Plan (ESMP). Such reviewed ESIA against the designed work must be reflected in the work plan in the inception report. The Consultant will provide feedback to the client to ensure that design issues emanating in the ESIA report are incorporated in the final construction drawings.
- (ii) Review of the architectural design of the buildings following acceptable modern professional standards. Full (final) construction drawings to be ensured that are on appropriate scales, e.g. 1:100, 1:50, 1:20 and 1:10 as the need arises. The reviewed construction drawings will include plans, sections, and elevations and associated details as appropriate. The reviewed architectural details should cover hard (pavements) and soft (grass) landscaping as this is also an important aspect of the project. Analyse the Architectural /engineering soundness of construction drawings and contract documents.
- (iii) Review geotechnical report prepared and advises on the content of all necessary information for the proposed construction requirement (review and detailed studies work scopes should be clearly presented and approved by the Client).

- (iv) Ensure reviewed work constitutes complete sets of all necessary engineering structural designs and detailing of the structures and services required. This will involve electrical installation, telephone services, Local Area Network systems (LAN), Closed Circuit Television systems (CCTV), Alarm systems, Fire Fitting systems, Internal access roads, Parking facilities, Sewerage systems, Solid waste disposal systems, Storm water Drainage systems, Water supply systems, and other water reticulation systems. The Consultant also to ensure that construction drawings also provide necessary trunking and ducting that will accommodate the centralized Information Technology system on the buildings and across the roads and at all necessary external surroundings. The Consultant should also ensure that the reviewed specifications, Bills of Quantities and conditions of contract for all these services are appropriate.
- (v) Reviewed work should consider design assumptions, design calculations and specifications and ensure their compliance with the applicable codes and regulations.
- (vi) Review should also ensure on appropriateness of selection of material specification from design alternatives.
- (vii) The Consultant will in liaison with the Client submit to the relevant local authorities all the relevant designs, calculations and drawings to enable the local authorities issue the required building permits (if not yet acquired) well in advance of the commencement of the construction's activities on site; and he/she will supervise the actual construction works.
- (viii) Consultant will review a designed work to ensure the accessibility to buildings and additional internal facilities for physically challenged persons is appropriately allocated. This should go in line with a consideration of the best practice and positive legal regulations in Tanzania regarding the rights of the disabled persons.
- (ix) Reviewed design should take regards of the construct-ability of the project, construction means, methods and techniques employed.

#### **2.3.2.2 Work Plan**

The Consultant shall prepare a detailed work plan for undertaking this assignment. The Detailed work plan/implementation Program for this Assignment shall be one month for design review of drawings, 18 Months for constructions and 12 Months for Defect Liability Period. The Team is expected to commence work the same day of signing the contract.

#### **2.3.2.3 Cost Estimates**

A detailed Cost Estimate and summary of the project shall be submitted showing total cost for construction in each building. In order to establish a fair and reasonable estimate of the project cost, the Consultant shall ensure a prepared unit price is analyzed for each item using basic cost elements (labour, materials, equipment, tools, overheads, on-site costs, profit, etc.), and the cost of all taxes (direct or indirect, duties, levies and fees are shown separately. The estimated financial cost resulting from this analysis to be ensured that it is accurate to within +10% and presented in Tanzanian Shilling (TZS). The cost estimates shall also include the costs for implementation of Environmental and Social Management Plan (ESMP), and Health Services Management and Policy (HSMP) programme. The Team will be required to advise on cost effective and fit for purpose design in relation to Client's budget.

#### **2.3.2.4 Consultancy Fees**

A detailed financial proposal covering review design and post contract stage shall be submitted.

### **2.4 Supervision of the works**

The Consultant shall provide all site and backup staff and exercise all necessary architectural, engineering, surveying, quantity surveying, quality and financial control of the construction works in accordance with the approved designs, specifications, conditions of contract and contract documents including the following:

- i) Ensure that the works are carried out by the Contractor in a professionally acceptable manner and in accordance with the requirements of the relevant regulatory authorities.
- ii) Approve Contractor's proposed designs/drawings for temporary works.
- iii) To examine and approve various plans and programs submitted by the Contractor. To review bonds validity.
- iv) Control the contractor's and sub-contractors' site personnel at all grades for suitability for the construction of the works;
- v) Check and approve the site installations, equipment plants that are to be used by the contractor for execute the works and safety;

- vi) Check and approve the materials testing laboratories that will be used during the construction;
- vii) Check the suitability of sub-contractors as they arrive on site;
- viii) Check materials and equipment for conformity with the tender specifications by physical inspection and by gathering the manufacturer's and suppliers' certificates of conformance;
- ix) Verify the contractor's purchasing schedules so that materials and equipment necessary for the swift advancement of the works are available when needed, thus ensuring the work keeps to the establishment programme.
- x) Provide day to day supervision of the works in terms of quality and quantity and arrange for monthly progress report. Ensuring that there is a Resident Engineer (RE) to supervise execution of works at site daily. Weekly reports to be submitted every Monday during the course of the project. Daily reports must be documented, compiled and submitted to the client along the weekly report for schedule and scope management. This will enhance quality control in line with documented quality assurance from methodologies provided;
- xi) Specify when all the necessary material tests will be conducted before they are incorporated into the works. Monitor the process of materials testing by the contractor.
- xii) Inspect the setting out of the works to make sure that construction conform to the standard practice, plumbing, waste water, drainage works and levelling as per the designs;
- xiii) Valuate contractor's application of payment by checking measured or estimated quantities of work completed. Advise the client and issue interim certificates of payments in accordance to the conditions of Contract;
- xiv) Provide continuous liaison with the Client on all possible changes on the designated scope and budget of works.

- xv) Inspect at regular intervals the Contractor's plant and facilities, for both construction production work and workers accommodation, to ensure that they conform with to both the conditions of contract and all government regulations;
- xvi) Inspect the entire Contractor's safety measures, including labour welfare, notify immediately both the Employer and the Contractor of any infringement or violation.
- xvii) Liaise and coordinate with relevant authorities to remove all obstacles and encumbrances from the project site, including utility relocation and tree cutting as required;
- xviii) Keep all records updated including reports, site diaries, correspondence, instructions given to Contractor, test records, measurement and quantity calculations, payment records and all other relevant documents pertaining to the supervision of the works;
- xix) Record all claims and submit recommendations to the Client for review and ultimate settlement, if justifiable;
- xx) Measure authorized changes and agreed quantities and cost with Contractors/Sub-Contractors. Estimate the cost effect of proposed changes before issue instructions. These changes must be communicated to the client for approval and a change order must be issued;
- xxi) Advise the parties under the Works Contract on any dispute arising under the Contract to ensure that disputes are resolved amicably as soon as possible without affecting the project;
- xxii) Ensure that the Contractor strictly adheres to the contract, specifications and bills of quantities in the execution of the works and advise the Client on the appropriate actions to be taken whenever there is a breach of contract or misconduct by the Contractor.
- xxiii) Ensure that the Contractor strictly adheres to the Environmental and Social Commitment Plan (ESCP).
- xxiv) Prepare monthly/periodic project reports as per formats approved by the Client and the World Bank. Detailed quarterly reports, to be submitted within 14 days of the end

of each quarter. Quarterly reports should include description of project activities illustrated by progress/completion photographs, status of any delays and contractual claims and details of all latest financial projections, an electronic copy and 4 copies to be submitted to the Project Coordinator;

- xxv) Arrange fortnight site meetings to be attended by all concerned parties and/or any other management meeting as may be deemed necessary. A summary/ draft of minutes in bullet form or description and action format must be presented in two (2) days' time after the meeting. Final minutes in approved format should be circulated within five (5).
- xxvi) A detailed Contract Completion Report of which, an electronic copy and 5 copies to be submitted to the Project Coordinator;
- xxvii) A Quality Assurance Manual, detailing all QA/QC procedures, to be submitted within ten (10) days of commencement of services, 6 copies to be submitted to the Project Coordinator;
- xxviii) Review and approve As-built drawings, operation & maintenance manuals where applicable and submit documents in hard and electronic copies to the Employer;
- xxix) Upon practical completion, the consultant shall be responsible to undertake final inspection prior to issuing of the practical completion certificate and a penultimate certificate.
- xxx) Monitoring the completed works after completion up to defects liability period. Issuance of certificate of making good defects, final completion and final payment certificate.
- xxxi) Monitoring the completed works after completion up to defects liability period;
- xxxii) Prepare variation orders whenever required and submit them to the Client for approval before giving relevant instructions to the Contractor.
- xxxiii) Facilitate the project handing over upon successful completion of the project.

- xxxiv) Prepare Project Final Accounts; one (1) month after expiring of defect liability period of the project. A draft copy of final account must be distributed to authorized parties within fourteen (14) days after practical completion.
- xxxv) Prepare and submit to the Client the final payment certificate for the completed works;
- xxxvi) Prepare a final report for the works. The report in addition to all aspects of the project should include lesson learned as a reference to future project execution and management.
- xxxvii) To approve return of bonds to the contractor after practical completion.
- xxxviii) Perform Regular inspection of the works during defect Liability Period
- xxxix) On completion of construction ensure the Client acquires certificate of occupancy from relevant authority;

## **2.5 Environmental and Social Health and Safety (ESHS) services by the Consultant**

For ESHS the scope of services of the consultant should be based on the following:

Ensure that the Contractor's ESHS performance is in accordance with acceptable international industry practice and delivers the Contractor's ESHS obligations.

The ESHS related services include but are not limited to:

1. Review and approve the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions (not less than once every 6 months);
2. Review and approve ESHS provisions of method statements, implementation plans, Gender Based Violence (GBV) prevention and response action plan, drawings, proposals, schedules and all relevant Contractor's documents;
3. Review and consider the ESHS risks and impacts of any design change proposals and advise if there are implications for compliance with ESIA, ESMP, consent/permits and other relevant project requirements;
4. Undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities related to the Works, to verify the Contractor's

compliance with ESHS requirements including its GBV/SEA (Sexual Exploitation or Abuse) obligations, with and without contractor and/or client relevant representatives, as necessary, but not less than once per month

5. Undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other ESHS related documentation, as necessary, to confirm the Contractor's compliance with ESHS requirements;
6. Agree remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor's ESHS obligations;
7. Ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with ESHS obligations;
8. Ensure that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;
9. Review and critique, in a timely manner, the Contractor's ESHS documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation;
10. Undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ESHS issues;
11. Establish and maintain a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g of those reporting allegations of GBV/SEA. These should be included in a log issue accessible to a specified professional.
12. Ensure any GBV/SEA instances and complaints that come to the attention of the consultant are registered in the grievance redress mechanism and subsequently sorted/resolved through proper procedures. Ensure all complainants receive the feedback timely

13. Ensure adherence to Environmental and Social Commitment Plan (ESCP) and adequate environmental and social institutional capacity is in place to support implementation, monitoring and reporting
14. Adequate implementation of environmental and social issues of sexual abuse and exploitation, effects of labour influx on local communities and concerns relate with labour conditions.
15. Ensure resettlement, access restriction and livelihoods restoration and grievance redress mechanism are in place and functioning,
16. Ensure there is appropriate measure in place for labor management that will be mobilized.

## **2.6 Testing, Commissioning and Completion**

- i) Witness any specified test done by the Contractor. (Material tests and Systems and services tests); The Consultant shall approve all the testing of materials used throughout the construction.
- ii) Conduct any independent tests necessary to confirm the results; The Consultant will recommend and supervise any remedial works that may be necessary to bring the construction to the required standard.
- iii) Prepare and issue a short summary report confirming the tests and clearly specifying any instructions to be issued to the Contractor;
- iv) Prepare a short technical report describing the Testing and commissioning. All carried out tests together with their reviewed results should be included in the consultant's monthly and quarterly reports;
- v) Issue the Taking over Certificate to the Employer.
- vi) The Consultant shall certify that the construction material brought at site by the contractor(s) is in accordance with the specifications and it had been tested as per standard practices.

- vii) The Consultant shall certify that works are executed as per approved design, drawings, standard specifications, technically sanctioned and within the provisions of contract agreement.
- viii) The Contractor shall submit the certified work record and drawings of works executed
- ix) The Consultant shall issue a Certificate of Completion to the Contractor verifying the outstanding defects the Contractor shall rectify before operational acceptance
- x) The Consultant shall arrange the operational acceptance and handover of the completed works from the Contractor to ARU upon satisfactory rectification of all the defects notified to the Contractor.

## **2.7 Consulting Services to be provided during Defects Liability Period Phase**

The Consultant shall oversee the works during the Defects Liability Period through regular visits. The Consultant is expected to carry out site visits at regular intervals during which the Consultant shall draw attention of the Contractor to any defects if and when noticed and shall supervise such remedial works. Prior to expiry of the defects liability period, the Consultant shall inspect the works according to the Condition of Contract and issue instructions for rectifications of all defects, imperfections of faults, and supervise the remedial works. Following the Employer's acceptance, the Certificate for Making Good Defects shall be issued. The Consultant shall assist the Employer in administrative matters related to the Works Contract. The tasks shall include but not limited to:

- i) Regular inspection of the works Contractor's remedy of defects. Advise ARU of any defects found during the defects liability period and recommend action needed to correct them.
- ii) Inspect, suggest mitigation measures and supervise remedial works of all Environmental, Social, Health and Safety matters
- iii) Prepare defects report after at the end of each inspection and testing period with full details of the cost and nature of the defects and the corrections thereof.

- iv) Conduct a final inspection of the works after the correction of all defects. This inspection shall be carried out jointly with the representatives of ARU.
- v) Finalize all the work and the records thereof including drawings, as-built drawings, operation and maintenance manuals and records of defect corrections during the Defects Liability Period.
- vi) Finalize evaluation all the outstanding claims from the Contractor and prepare the final payment certificate.
- vii) Prepare and issue the final payment certificate (final account) and final completion certificate.
- viii) Recommend the return of bonds and retention money.

### **3.0. REPORTING REQUIREMENTS**

The Team shall prepare and submit to ARU the following reports and Documents hereunder. They shall be in English and in a format approved by the Client.

#### **3.1 Phase I - Design Review**

##### ***3.1.1 Draft Review Reports***

Draft review reports may include an outline review of existing designs including Drawings, Specifications and Detailed Bills of Quantities. The report is designed to give the Client confidence that the assignment will be carried out as planned and as agreed upon in the contract. The report shall include but not limited to professional staff deployed and detailed involvement of staff in execution of duties. The report will also indicate the reviewed key Client's requirements including site information and further provide Consultant's work-plan. The report should state Consultant's services and general understanding of scope of those services, and frequency of reporting for approval by client. The report should also bring to the client's attention major problems that might affect the direction and progress of the work if any. The draft review report shall be submitted to the Client in three (3) copies within seven (7) days from commencement date to indicate any major findings that may have a scope or cost changes. The consultant will proceed (simultaneously with the client's review) to submit a refined design review report within the next seven (7) days of the commencement of the assignment. The Client shall review and approve the report within a period of five (5) calendar-days. The final document will be submitted within five (5) days after consultant

has received the comments. This will enable the Consultant to proceed with the next stage in the assignment. The report will be discussed with Ardhi University representatives while in draft form for more input if any. The Teams will use such inputs to improve the draft review report.

### ***3.1.2 Final Review Report***

Final review reports shall incorporate all comments raised by the Client's representatives. The report covering all aspects of design load estimation and all necessary assumptions on the same, approved design including architectural, structural, services (mechanical, electrical and data) drawings, Bill of quantities, specifications (an approved type of construction, quality of material and standard of workmanship should form part of the Final Report.

The final report should be due on the completion of Phase I assignment. A physical presentation in power point format will be part of Final Report. The report must be submitted in 5 hard copies duly signed by the Team Leader, final detailed design report and Tender documents for tendering purposes. These reports shall be submitted one week after receiving Client's and/or comments should there be any. Electronic version (in PDF format) shall be submitted to the client via agreed electronic memory disc.

## **3.2 Construction Supervision and Defects Liability Period (DLP) Phase**

### ***3.2.1 Assist the Client in Tender Administration***

Bidding process will be administered by the Client, the Consultant shall play advisory role by providing assistance. In particular, the Consultant shall assist Client in administration of tender for accounting activities assisted/performed during bidding administration.

### ***3.2.2 Inception Report***

The Consultant shall submit an inception report within four (4) weeks after the notification of the commencement of the Construction stage, the Consultant shall present to ARU consolidated work plan outlining methodologies, staff schedule, and a plan to ensure the quality of the services.

The inception report will address the following;

- a) Methodology and details of any modifications required in the original bills,
- b) Reviews of the Contractor's detailed program of work, showing time, duration and personnel as well as the inter -relationship between activities,

- c) Proposed methodology for tracking compliance with applicable technical specifications and Tanzania environmental laws and regulations, and site-specific Environmental and social management plan (ESMP).

### **3.2.3 Contract Management and Supervision**

The Team will undertake Post-Contract supervision (**Architectural, Structural/Civil Engineering, Services Engineering and Quantity surveying**) under the Contract Management of Ardhi University. The Consultant shall arrange and coordinate all project meetings such as site meetings, technical meetings and management meetings.

### **3.2.4 Progress Report (Weekly, Monthly and Quarterly)**

The Consultant shall conduct Valuation of work in progress and prepare quarterly progress reports of the project, and submit to the Client. The Consultant shall prepare and submit monthly progress reports which shall address the status of work measured as “percent completion” against the schedule approved at the onset of work. The monthly progress reports shall contain an accurate, up to date, account of all work accomplishments, work scheduled and outstanding issues of the works. The reports shall also address the compliance of the Contractor and the works permits, ESMP as well as financial and scheduling commitments. At the end of each report the Consultant shall append colored progress pictures for physical progress at site for the particular reporting period. The monthly reports shall be submitted to the Employer not later than 7th day of the month following the end of the monthly period covered by each report. The quarterly reports shall be submitted to the Employer no later than 7th day of each yearly quarter (3 months) of project execution.

Weekly Reports by the resident engineer/ architect to be submitted every Monday during the course of the project. Daily reports must be documented, compiled and submitted to the client along the weekly report for schedule and scope management. This will enhance quality control in line with documented quality assurance from methodologies provided;

The monthly and quarterly report shall containing physical and financial progress and implementation and monitoring of the ESMP, HSMP and other plans such as stakeholder engagement plan. The format of the monthly progress report shall broadly consist of:

- Cover to indicate Country, Regional, District, Beneficiary, Project name and Chronological number of reports;
- Page 1 Index;
- Page 2 Location map of project site/s
- Page 3 Project details – All relevant dates of the Contract, such as the Contract signature date, site insurance expiry date, construction permit expiry date, mobilisation date, contract expiry date and other relevant dates;
- Page 4 Block diagram of Supervising Engineer's personnel with names;
- Page 5 Block diagram of Contractor's personnel with names;
- Page 6 Responsibility Assignment Matrix (who is in charge of what, names of certified laboratories or approving agencies where official tests will be performed);
- Page 7 Project Schedule to be updated monthly;
- Page 8 Percentage completion of BOQ showing drawdown;
- Page 9 Brief description (text) of construction activities carried out over the last month;
- Page 10 Description (text) of laboratory and in-situ tests carried out over the last month and a review of the results obtained. Test readings and laboratory reports should be in a separate annex.
- Page 11 CMP – 1-page description of approved Construction Management Plan in 1<sup>st</sup> progress report. (In the 2<sup>nd</sup> and successive reports, only report changes in CMP and any deviations by the contractor)
- Page 12 ESMP – Draw up matrix table for project with help from a separate ESIA report finding; include reporting requirements for environmental and social issues as per the approved environmental and social management plans, like resettlement, livelihoods, stakeholder consultation, grievances registered and resolved, labor influx issues.
- Page 13 Health and Safety plan report sheet drawn up by contractor;
- Page 14 Status of personnel and human power on site (previous month and current month);
- Page 15 Status of Plant and equipment on site (previous month and current month);
- Page 16 Status of stockpiles and materials on site in table format;
- Page 17 Daily weather diary for the month of reporting;
- Page 18 Chronological list of all official correspondence with contractor and client;

- Page 19 List of Revisions, drawings or variations (date initiated, and date approved, and date issued);
- Page 20 Status of Project grievance redress mechanism including issues to be resolved Client-Stakeholder or Client-Contractor-Sub contractors;
- Page 21 Financial draw down. Funds still available for disbursement, Interim Payment Certificate (IPC) and cumulative drawdown;
- Page 22 Supervising Engineer's comments on the progress of the works;
- Page 22 Supervising Engineer's suggestions/feedback for head office/client;
- Annex 1-Progress photos from site – Low resolution pictures, 3 to each page, total 5 or 6 pages;
- Annex 2-Attach copies of official lab results (concrete, aggregate and batching water quality, environmental readings where appropriate, etc)

### ***3.2.5 Preparation of Interim Certificates***

The consultant shall prepare interim valuation and payment certificates to the interval as per contractor's applications of payment.

### ***3.2.6 Financial Appraisal***

The Consultant team shall be required to conduct financial assessment of the project as might be required by the Client. Prepare cash flow forecast, project physical and financial progress reports.

### ***3.2.7 Project Handover Report upon Practical Completion***

The report should be due on completion of the Post- contract assignment. The report will be discussed while it is still in draft form for Ardhi University input if any. The Teams will use such inputs to improve the draft.

A physical presentation in Power point format will be part of practical completion report. Upon completion and hand over of the project to Ardhi University, consultants will prepare practical completion certificate and a penultimate certificate. This Report will mark the start of the Defects Liability Period. It shall include a summary of activities and components completed and list of outstanding works and snag list. The report shall cover at least the following items:

- a) Background, objectives, and scope of the construction

- b) The quality, conformity, consistency of construction practices.
- c) The fitness for purpose, utility and quality of constructed assets.
- d) The outstanding defects that the Contractor must rectify before operational acceptance and handover of completed works.
- e) Schedule for rectifying defects.
- f) A schedule of defects and maintenance criteria to guide assignment of liability for defects arising during the Defects Liability Period, including environmental liabilities.
- g) A schedule of inspections and testing which a Consultant have carried out during the Defects Liability Period to identify other defects that might arise during the period.
- h) A list of operation manuals (including booklets, keys, equipment and maintenance guide.

### ***3.2.8 Final Completion and Final Handover Report***

The Consultant shall prepare a final completion report of the project, as defined. The report shall include recommendations to the Employer for final Acceptance of all the works included in the contract documents and amendments, with a quality certification, stating that evaluation parameters have been accomplished. A final completion and handover report shall be prepared upon completion of the Defects Liability Period.

### ***3.2.9 Environmental and Social Health and Safety (ESHS) Reporting***

- a) The Consultant shall provide immediate notification to the Client should any incident in the following categories occur while carrying out the Services. Full details of such incidents shall be provided to the Client within the timeframe agreed with the Client.

Confirmed or likely violation of any law or international agreement;

- i. Any fatality (lost life) or serious injury;
  - ii. Significant adverse effects or damage to private property (e.g. vehicle accident); or
  - iii. Any allegation of Gender Based Violence (GBV), Sexual Exploitation or Abuse (SEA), sexual harassment or sexual misbehavior, rape, sexual assault, child abuse or defilement, or other violations involving children,
- b) Ensure that contractor immediate notifications on ESHS aspects are shared with the Client immediately;

- c) Immediately inform and share with the Client any immediate notification related to ESHS incidents provided to the Consultant by the Contractor as part of the Progress Reporting;
- d) Share with the Client in a timely manner the Contractor's ESHS metrics as part of the Progress Reports.
- e) Ensure that all complaints are resolved and both contractor and complainant are immediately informed on the resolutions.

#### **4.0 CONSULTANCY FEES AND PAYMENTS**

The assignment is divided into two phases: Phase 1- Design review of drawings and Phase 2 - Construction Supervision and Defect Liability Period. The consultants should clearly indicate the costs of each activity when submitting their financial proposal. Payment to the consultant will be made in consideration of the achieved milestone based on project activities. Payment shall be effected after completion of specific tasks and submission of the associated reports. Milestone for payments shall be effected after submission and obtaining approval of the under mentioned activities with the associated reports/documents. The terms and conditions of payment shall be as follows: -

The Consultant shall clearly submit separately each consultancy services (technical and financial) fee on design review of drawings and construction supervision when submitting the financial proposals. Payment shall be paid monthly as per terms and conditions of time based contracts. The Consultant shall price separately for each stage described above (Design Review and Supervision Phase). The Consultant's remuneration shall be deemed to cover his liabilities, taxes, travel costs and support of his head office staff, Resident Engineer (RE) and all his obligations other than additional services not covered by these terms of reference.

Detailed fee for design review and construction supervision shall be submitted separately as financial proposal. Reimbursable expenses, which cover all out-of-pocket expenses and shall be made against contractual acceptable documentary evidence, as agreed with the Client.

**Table 2:** Description of deliverables in Phases

<b>Phases</b>	<b>Description of deliverables</b>	<b>Time</b>
Design review of drawings	Submission of Acceptable design review report	1 month
Construction Supervision and Defect Liability Period	During this phase, all remunerations to the consultant shall be time based as per terms and conditions of time-based contracts. The professionals to be deployed on supervision works as mentioned under paragraph 5.1 of this TOR shall be allocated with their person months expected and compute their fees resulting thereof.	Monthly

#### **4.1 Site visit by the consultant**

- a) The Consultant at their own costs is advised to visit and examine the Sites and obtain all information that may be necessary for preparing their proposals under this assignment;
- b) The Consultant should ensure that the Client is advised of the site visit in adequate time to allow her make appropriate arrangements;
- c) The costs of visiting the Site shall be bore by the Consultant-

During the course of this assignment, the Consultant is free to seek any additional information/clarification on any issue relating to the earmarked Project from Ardhi University.

#### **5.0 CONSULTANT TEAM**

The firms should have at least ten (10) years' experience in the building industry, and must have demonstrated capabilities of undertaking works of similar nature, value and volume. Supporting documents of at least five (5) projects of similar nature executed by the firm within the previous ten (10) years (2011 – 2021) is vital.

Firm's ability to manage at least three (3) projects of not less than the cumulative total of TZS 20 Billion delivered within expected project parameters. The consulting firm should be registered by

recognized professional boards and authorities recognized internationally and upon commencement of the project the consultant must be registered by recognized professional boards and authorities in Tanzania.

HEET project comprise various projects in different parts of the country under various implementing Agencies. Each project will be designed (where applicable) and supervised independently, hence entailing concurrent activities. Consultant firm or teams are permitted to participate in tendering for any of HEET projects. However, it will be mandatory for each a consulting firm to present independent qualified manpower/ professionals with supporting evidence for each project tendered since the projects will run simultaneously. Failure to demonstrate capacity in terms of assigned staff for various projects will lead to disqualification. Implementing Agencies will entitled to liaise each other to confirm on availability of independent manpower prior to award of contract.

The staff to be provided by the Consultant shall be sufficient to cover the services under this contract. The timing and inputs of each professional staff member shall be in accordance with the agreed program for the delivery of services and appropriate to the project. The Consultant shall employ only such key staff whose curriculum vitae or certificates or professional registration have been reviewed and approved by authorizing bodies and thereafter Ardhi University. Staff employed must be relevant to the project with intended actual participation in the project. There should be a clear breakdown of all staff members that intend to be involved in the projects in terms of man month realistically to the actual individual executing a particular task. There must be a clear breakdown of all staff that intends to be involved in the projects in terms of man month realistically to the actual individual executing a particular task.

The Consultant must describe in its technical proposal the system of quality assurance and how they will support experts on site with all required logistical support. Quality control of reports in terms of content, (standardized) layout and quality of language is a key aspect of quality assurance. In addition the Consultant must describe the technical and managerial capability of the firm (provide the structure of the organization general qualifications and number of permanent staff.

The Consultant will be required to have a full range of specialists to cover all the technical fields included in the project and to make these services available as required during the term of the Contract.

The Consultant must be capable of providing fully competent expertise in the following disciplines on as needed basis. In preparing proposals, firms must provide Curriculum Vitae for all positions indicated in Table 3 of experts and their qualifications

### **5.1 Experts and their qualifications (Design review, Construction Supervision and Defect Liability stage)**

**Table 3: Key expert's qualifications**

<b>Category of Consultant</b>	<b>Qualifications and Experience of key experts</b>
<b>Team Leader (1)</b>	<p>The Team Leader shall be a registered Architect or Engineer or Quantity Surveyor with a minimum qualification of Master's Degree in Civil Engineering/Project Management/Construction Management/Architecture/Building Economics/ Quantity Surveying/ Construction Technology.</p> <p>She/he must have at least 15 years cumulative experience in design review of drawings and supervision of donor funded projects or similar nature projects.</p> <p>Must have served in a similar capacity in the design review of drawings and implementation of three (3) projects of similar nature, magnitude and complexity in the last Ten (10) years.</p> <p>Supporting documents illustrating his/her actual participation in projects of similar nature is vital.</p> <p>A clear demonstration – supporting documents of his/her project management abilities in the past 10 years of 3 projects with value of not less than the cumulative total of TZS 20 Billion.</p> <p>Must demonstrate good communication and interpretation skills and working knowledge of ICT applications. Fluency in written and spoken English is mandatory. He/she should be registered as a professional by relevant Board.</p>

<b>Architect (s)</b>	<p>She/he must be a Registered Architect with a degree in Architecture or equivalent.</p> <p>She/he must have at least ten (10) years cumulative experience in architectural practice, planning and designs and with at least in Five (5) years of practical working experience in design of buildings construction and the construction industry as a whole after registration as an architect.</p> <p>She/he must have served in a similar position in at least three (3) projects of similar magnitude and complexity within the last ten (10) years.</p> <p>Must be conversant with all aspects of architectural design, landscaping, interior design, and Computer Aided Designs (CAD) plus Microsoft office.</p> <p>Supporting documents demonstrating her/his knowledge in design and construction planning to be attached. Evidence of his experience in executing projects of not less than the cumulative total of TZS 10 billion is vital.</p> <p>The Architect should have proven ability to lead the design teams in the design (new and rehabilitation) and supervision of building construction activities.</p> <p>Fluency in written and spoken English is mandatory.</p>
<b>Quantity Surveyor</b>	<p>She/he must be a Registered Building Economics or Quantity Surveyor by professional board with a degree in Building Economics/Quantity Surveying/Building surveying/Construction management or its equivalent. She/he must have at least ten (10) years cumulative experience in conducting measurement of quantities in infrastructure projects.</p> <p>She/he must have served as a Quantity Surveyor in at least three (3) projects similar magnitude and complexity within the last 10 years with supporting evidence. Supporting documents for valuation of</p>

	<p>three projects with value not less than the cumulative total of TZS 20 Billion are vital.</p> <p>Must be well conversant with current market prices. Evidence of experience in dealing with contractual and legal matters. Managing costs and providing cost projection prior to the contractor's application of payment to make sure that the initial budget is not exceeded is mandatory.</p> <p>Evidence of proficiency in Quantity Surveying Professional Software. Fluency in written and spoken English is mandatory.</p>
<b>Structural Engineer</b>	<p>She/he must at least be a Registered Professional Civil/ Structural Engineer with a degree in above field. Postgraduate qualification is an added advantage.</p> <p>She /he must have at least ten (10) years cumulative experience in building and civil engineering designs and supervision of construction works.</p> <p>Must have served in a similar capacity on at least three (3) projects of similar magnitude and complexity.</p> <p>The Civil/ Structural Engineer must be conversant with all aspects of reinforced concrete design, design of steel structures, design of timber and steel structures, strength of materials, soil mechanics.</p> <p>Supporting documents illustrating his/her actual participation in projects of similar nature is vital.</p> <p>A clear demonstration – supporting documents of his/her value engineering solutions for project of similar magnitude (with value of not less than the cumulative total of TZS 10 billion in the previous 10 years is an added advantage.</p> <p>Fluency in written and spoken English is mandatory.</p>
<b>Services Engineer (Mechanical/Plumbing)</b>	<p>She/he must be a Registered Mechanical/ Sanitation Engineer by professional board with a degree in Mechanical/ Sanitation Engineering.</p>

	<p>She/he must have at least ten (10) years cumulative experience in design and mechanical installations. She/he must have served in similar capacity in design of mechanical installations in at least three (3) projects of similar magnitude and complexity in the last ten (10) years (2012 - 2021).</p> <p>Experience in supervision of plumbing systems (cold and hot water installation, waste and soil water systems), drainage and sewage systems, mechanical ventilation, lift design, firefighting, security systems, and the construction industry as a whole.</p> <p>Supporting documents demonstrating her/his knowledge in design (both new and rehabilitation projects) and mechanical installations management to be submitted.</p> <p>Evidence of his/her experiences in executing projects of value not less than the cumulative total of TZS 10 billion is vital.</p> <p>Illustration of his/her ability to provide cost effective mechanical engineering solutions as per design and site conditions is vital.</p> <p>Knowledge in CAD programs and costing/ valuation of mechanical works is necessary. Fluency in written and spoken English is mandatory.</p>
<b>Services Engineer (Electrical)</b>	<p>She/he must be a Registered Electrical Engineer by professional board with a degree in Electrical Engineering. She/he must have at least ten (10) years cumulative experience in design of electrical installations.</p> <p>She/he must have served in similar capacity in design of electrical installations in at least three (3) projects of similar magnitude and complexity.</p> <p>She/he must have served in similar capacity in design of electrical and installation systems and the construction industry as a whole.</p> <p>The Electrical Engineer must be conversant with all aspects of design and construction/ installations of electrical systems in</p>

	<p>office/public buildings and supply main connections in at least three (3) projects of similar magnitude and complexity.</p> <p>Supporting documents demonstrating her/his knowledge in design and construction management to be submitted. Evidence of his experience in executing projects of not less than the cumulative total of TZS 10 billion is necessary.</p> <p>Illustration of his/her ability to provide cost effective electrical engineering solutions for new design and rehabilitation works as per site conditions is vital.</p> <p>Knowledge in CAD programs and costing/ valuation of electrical works is necessary.</p> <p>Fluency in written and spoken English is mandatory.</p>
<b>ICT Specialist</b>	<p>She/he must be a Registered certified ICT with a degree in ICT/ Computer science/ Information Technology or equivalent. She/he must have at least five (5) years cumulative experience in ICT projects.</p> <p>She/he must have served in similar capacity in at least two (2) projects of similar magnitude and complexity within the last ten years. Supporting documents of his/her actual involvement in such projects is necessary.</p> <p>ICT Consultant should possess enough work experience in Technical solution designs, integration and expansion for large ICT projects, Wireless LAN design, Implementation and Management, Structured Cabling Design and Installation, Core network design, Server room layout design and equipment installation, TCP/IP protocol stack, Voice and Video over IP service delivery using proprietary and open source platforms, Network analysis tools, Configuration of network equipment, Access Control/Security System and Communication Systems Analysis</p> <p>Fluency in written and spoken English is mandatory.</p>

<b>Land Surveyor</b>	<p>She/he must be a Registered Land Surveyor by recognized professional boards with a degree in land surveying or its equivalent. She/he must have at least five (5) years cumulative experience in land surveying and related infrastructure.</p> <p>She/he must have served as a Topographical Surveyor in at least three (3) projects similar magnitude and complexity.</p> <p>Supporting documents of his/her actual involvement in such projects is necessary. Fluency in written and spoken English is mandatory.</p>
<b>Environmental specialist</b>	<p>She/he must be a holder of Degree in Environmental Engineering or Sciences, with broad range of experience in ESIA and community assessments and a minimum of five (5) years relevant experience in project design and construction of similar nature and complexity. Experience in environment management in tropical countries is mandatory during supervision of building construction project in order to ensure that the construction works adhere to developed project reports e.g. ESIA/ESMP. She/he must have knowledge and understanding on World Bank's Environmental and Social Standards (ESS) to address environmental and social issues within the project Cycle.</p> <p>She/he must have served in similar capacity in construction of at least three (3) building projects of similar magnitude and complexity.</p> <p>Supporting documents of his/her actual involvement in such projects is necessary.</p>
<b>Sociologist</b>	<p>She/he must be a holder of Degree in Social Sciences, Development Studies, Community Development or related fields with demonstrated experience in environmental and related studies and a minimum of five (5) years relevant experience.</p> <p>He/she must have working experience related to social impact management in the supervision of construction project including ensuring that the construction works adhere to ESIA/ESMP.</p>

	<p>Relevant experience in supervising construction project which follow specific relevant standards of World Bank Group EHS Guidelines including aspects of gender based violence, sexual abuse and exploitation and conflict analysis. She/he must have knowledge and understanding on World Bank's Environmental and Social Standards (ESS) to address environmental and social issues within the project Cycle.</p> <p>He/she must be fluent in written and spoken English and ability to communicate ideas freely and easily are essential qualities.</p>
<b>Sexual Exploitation and Abuse (SEA/Gender Based Violence) Specialist</b>	<p>She/he should have at least a bachelor's degree or equivalent in the social science, gender, women studies, with experience in gender equality and women empowerment agenda, stakeholder consultation, labour and working conditions, resettlement and health and safety with a minimum of 10 years of field experience supervising similar projects including aspects of gender based violence, sexual abuse and exploitation, social and conflict analysis. She/he must have served in at least two (2) construction projects of similar complexity. Fluency in written and spoken English is mandatory on similar assignments with proven experience to recognize and to deliver good industry practice with respect to Environment, Social (including sexual exploitation and abuse (SEA) and Gender-Based Violence (GBV), Health and Safety (HS).</p> <p>He/She should have excellent communication skills, fluent in written and spoken Swahili and English languages.</p>
<b>Resident Engineer</b>	<p>Shall be on site full time during the construction period and part time during the DLP.</p> <p>She/he must at least be a Registered Architect/ Civil/ Structural with a degree in above field. She /he must have at least five (5) years cumulative experience in building and civil engineering designs and construction works.</p>

	<p>Must have served in a similar capacity on at least two (2) infrastructure projects of similar magnitude and complexity within the last five years.</p> <p>He /she shall be responsible for giving directions/instructions (as directed and approved by the Team leader) to the contractor or to the foreman-in charge in respect of; the interpretation of the Tenderers' instructions, Drawings, specifications, or bill of quantities; and any other matter in respect of which the Architect/ engineer is expressly empowered to issue instructions.</p>
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### ***Non-Key Experts***

In addition to the key personnel designated above, the Consultant may deploy Non-Key Expert to assist with the supervision of the works as deemed fit. In this case, it is at the discretion of the Consultant to propose Non-Key Experts for successful implementation of the assignment.

### **Note:**

CVs for Support Staff will not be evaluated. However, evidence of professional registration and academic certificates for key staff should be submitted and will be evaluated.

## **6.0 Estimated Time on Task for Key Personnel**

The estimated number of professional staff-months required for the assignment is **90.0** Staff-Months as follows:

**Table 4: Breakdown of Staff-Months for Key Personnel for Each Phase**

S/N	KEY STAFF POSITION	STAFF - MONTHS			
		Design Review Stage	Supervision Stage	Defect Liability	Total
1.	Team leader	0.5	8.5	1.0	10
2.	Architect 1	1.0	6.0	1.0	8.0
3.	Architect 2	0.5	6.0	0	6.5
4.	Quantity Surveyor	1.0	9.0	0.5	10.5
5.	Structural/Civil Engineer	0.8	6.5	0	7.3
6.	Mechanical Engineer	0.5	6.0	0.5	7.0

7.	Electrical Engineer	0.5	6.0	0.5	7.0
8.	ICT Specialist	0.5	4.0	0.5	5.0
9.	Land/Topographical Surveyor	0.2	1.0	0	1.2
10.	Environmentalist	0.25	2.5	0.25	3.0
11.	Sociologist	0.25	2.5	0.25	3.0
12.	Sexual Exploitation and Abuse (SEA/Gender Based Violence (GBV) Specialist	0.0	2.5	0	2.5
13.	Resident Engineer/	0	18.0	1.0	19.0
<b>Total</b>		<b>6</b>	<b>78.5</b>	<b>5.5</b>	<b>90.0</b>

## 7.0 IMPLEMENTATION TIME FRAME AND SCHEDULE

### 7.1 Time frame

The overall time frame for implementation of consultancy works for design review of drawings and supervision of construction work for is estimated at a total of **31 calendar months and 1 Month** (1-Month for Design review, 12-Months for Construction Supervision and 12-Months for Defects Liability Period) starting from the date of commencement of Consultant's assignment. The defect liability period shall be extended to a period of Twelve (12) calendar-months after completion of works.

### 7.2 Implementation Schedule

The breakdown of the estimated time frame and implementation schedule for the design review of drawings and supervision for construction of teaching and learning facilities which are **Workshops for priority degrees, Multipurpose Classrooms, Multipurpose Laboratory and Studio Building.** is set out in the Table 5.

**Table 5: Implementation time frame for design review and supervision**

Item	Activity description	Duration (months)
<b>1</b>	<b>Design review</b>	
A	Design review of drawings	

	<b>Total duration Design review</b>	<b>1</b>
	<b>Include tender process</b>	
<b>2</b>	<b>Post Contract Stage</b>	
B	Construction and Supervision	18
C	Defects Liability Period	12
	<b>Total duration Post Contract stage</b>	<b>30</b>
	<b>Total Duration for the consultancy services</b>	<b>31</b>

## **8.0 DATA, SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT**

### **8.1 Information to be provided by the Client**

The Client will provide basic data needed to facilitate the assignment; these include assistance on matters related to administration as required for carrying out the work and liaison necessary for this purpose. In addition, the consultant will have access to all available information that is; Master Plan, Planning Consent or Building Permit – if any Feasibility study report, Geotechnical and Topographical survey reports. On technical issues regarding the documentation, Consultant will liaise with Clients in-house technical team. A pre-briefing meeting will be held at Ardhi University with prospective consultants to familiarize with this assignment.

### **8.2 Obligation of Consultant and Client**

#### **8.2.1. Client**

- i. The Client will provide the necessary available documents for the task as requested by the consultant. The Consultant shall be responsible for the accuracy of data and correctness of the information, analysis and interpretation of the data and recommendations thereof. All such documents, data and information shall be treated as confidential and shall not be used for any purpose not related to the project.
- ii. The Client will assist the Consultant to meet Government Departments and other agencies as needs arise. The consultant shall be fully responsible for subsequent follow up.
- iii. The Client will appoint a Project Coordinator for the assignment who will guide the implementation of the project including providing guidance to the Consultant during the project duration.

- iv. Ensure the consultant's performance complies with the Terms of Reference of this project and is reported to the employer on monthly basis or any time in case of emergency.
- v. Ensure all payments are made according to the contract upon receiving the certificate of actual measurements taken by the employer team, consultant, and Contractor.
- vi. Ensure the availability of counterpart staff.
- vii. Receive and evaluate regular reports from consultant attached with the original reports from Contractors
- viii. Ask/demand clarification from the Consultant from time to time

### **8.2.2. Consultant**

- i. The Consultant shall be responsible for the execution of the entire assignment as described in this Terms of Reference (TOR) and shall provide such facilities, staff and equipment that will enable her to execute the assignment in a timely and efficient manner.
- ii. The Consultant shall be responsible for organising her/his office. She/He will be responsible for her accommodation, transport, equipment, supplies, secretarial services and such other services that are necessary for smooth and efficient execution of the assignment.
- iii. The Consultant shall allow working with counterpart staff from Ardhi University for the duration of the consultancy service. The Consultant shall prepare a management, control and supervision of projects and it is expected that the counterpart staffs will be fully integrated within the consultants operations for capacity building.
- iv. Shall review specifications and bills of quantities for the entire assignment including submission of confidential cost estimates of the various components.
- v. Shall review bidding documents for the entire assignment. Assist the client in obtaining qualified contractors for the execution of the works. In doing so the consultant shall be available to assist the Client in the bidding proceedings and in particular undertake the following activities:
  - a) Provide detailed clarification as requested from the bidders.

- b) Assist the Client and the Tender Board in the preparation of the Bid Evaluation Report, negotiation and recommendations for award.
- vi. The Consultant shall be responsible for the quality, safety, and security of the submitted designed works and specifications.
  - vii. The consultant shall adhere to different statutory obligations such as; insurance, taxes, and duties related to the design works shall be the responsibility of the consultant. The Consultant must contact the Tanzania Revenue Authority for specific details.
  - viii. The Consultant must comply with the Terms of Reference for this project. Arrange for own office space expenses and transportation activities related to this project (including travel costs, documents and drawings preparations/ submissions and per diems).
  - ix. Preparations and submission of reports as per these terms of reference. The Consultant shall allow working with counterpart staff from ARU for the duration of the consultancy service.
  - x. The Consultant shall prepare a management, control and supervision of projects and it is expected that the counterpart staffs will be fully integrated within the consultants operations for capacity building.
  - xi. The consultant shall submit a project supervision plan and project performance management plan.
  - xii. Consultant shall be responsible for obtaining all necessary work permits (if applicable) and cover all necessary costs for his/her expatriates and any other necessary consent from relevant statutory bodies.
  - xiii. Provide designers risk assessment in accordance with Environmental, Health and Safety policies.
  - xiv. Ensure the compliance of the contractor's construction drawings with the specifications of the contract, and subsequently approve such drawings; and
  - xv. Participate in all site meetings during construction.

- xvi. To enhance HEET education development plan the consultant should practice professional development and responsibility. The consultants are encouraged to train and engage graduates architects/ quantity surveyors and engineers in order to boost their experience in design and management. This will ensure professional continuity and sustainability for future projects. More specifically for ARU, there should be allowance of students to visit the site regularly and gain practical knowledge on applicability of theoretical studies.

## **9.0 PROJECT LIBRARY**

The Consultant shall create a library of all the documents, reports, maps, working papers, progress pictures, and other reference material used and./or created during the period of the work. A list of documents proposed to be kept in the library shall be included in the report for acceptance by the Employer.

During the course of the work the Consultant shall maintain it in good order and in a reference format in office space so as to be used by the Ardhi University (Client) staff. On completion of the period of work, the entire contents of the project library will be transferred to the Employer in good order and properly indexed and marked.

## **10.0 MANDATORY STANDARDS**

- a) All measurements in metric units
- b) All drawings to have legend explaining symbols
- c) All drawings to be dated and signed by Design Consultant
- d) All Electrical drawings to be dated and signed by Electrical Engineer
- e) All designs must conform to all applicable standards
- f) Summary sheet with legend to all drawings
- g) A legend to indicate changes to the drawings with date of these changes
- h) Design to be based on full topographic survey or spot levels as the site requires, determining exact quantities.

- i) Design based on soil report that assesses pre requisite foundation type required.
- j) A percolation test done according to Ministry of health standards for all sanitation and drainage requirement.
- k) Bills of Quantity shall follow the prescribed standard and not include Prime Cost Sums and can only include provisional sums where absolutely necessary (i.e. only for works or for costs which cannot be entirely foreseen, quantified or detailed at the time tendering documents are prepared). The justification for ALL Provisional Sums must be outlined in a separate document, accompanying the Bills of Quantities;
- l) The appendices shall carry a 'List of Drawings' from which the Bill of Quantities was prepared. Each page of the BOQ shall carry a footer indicating the total prices on that particular page and read 'carried to collection'. The BOQ shall carry a general summary.
- m) All quantities are to be measured in metric units and rounded off to two decimal places.
- n) Engineering Services and external works shall be priced and not billed as a lump sum.
- o) Preliminaries should be properly priced.
- p) All provisional sums must be justified on a separate document.
- q) The Appendices shall carry a “List of Drawings” from which the Bills of Quantities was prepared.
- r) Each page shall carry a footer indicating the total of prices on that particular page. This footer shall read “Carried to Collection”.
- s) The Bills of Quantities shall carry a General Summary.
- t) A printed copy of the priced Bills of Quantities should be submitted in electronic format.
- u) Maintenance Plan comprising an inventory of the number and types of fixtures, surface areas and other amenities with a schedule of frequency and cycle of maintenance of the inventory listing; and
- v) The design consultant to provide Engineering specification covering all aspects of the proposed works.

## 11.0 ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT

The consult should follow the guidelines as provided by Higher Education for Economic Transformation (HEET), Environmental and Social Management Framework and associated instruments including the Environmental and Social Management Plan (ESMP) for proposed construction works. (available at <http://www.moe.go.tz/sw/article/higher-education-for-economic-transformation-project-documents>)

For the Supervision Phase the Consultant should attach or refer to the Consultant's environmental, social, health and safety policies that will apply to the project. As a minimum, the policy is set out to the commitments to:

1. Apply good international industry practice to protect and conserve the natural environment and to minimize unavoidable impacts;
2. Provide and maintain a healthy and safe work environment and safe systems of work;
3. Protect the health and safety of local communities and users, with particular concern for those who are disabled, elderly, or otherwise vulnerable;
4. Ensure that terms of employment and working conditions of all workers engaged in the Works meet the requirements of the ILO labour conventions to which the host country is a signatory;
5. Be intolerant of, and enforce disciplinary measures for illegal activities. To be intolerant of, and enforce disciplinary measures for GBV, inhumane treatment, sexual activity with children, and sexual harassment;
6. Incorporate a gender perspective and provide an enabling environment where women and men have equal opportunity to participate in, and benefit from, planning and development of the Works;
7. Work co-operatively, including with end users of the Works, relevant authorities, contractors and local communities;
8. Engage with and listen to affected persons and organizations and be responsive to their concerns, with special regard for vulnerable, disabled, and elderly people;
9. Provide an environment that fosters the exchange of information, views, and ideas that

is free of any fear of retaliation, and protects whistleblowers;

10. Minimize the risk of HIV transmission and to mitigate the effects of HIV/AIDS associated with the execution of the Works;
11. Provide mechanism to resolve grievances including those related to Gender Based violence, Sexual Abuse and harassment; and
12. Ensure that there are ample measures to minimize the risk of COVID – 19 transmissions during the entire period of assignment.

The policy should be signed by the senior manager of the Consultant. This is to signal the intent that it will be applied rigorously.

## **12.0 CODE OF CONDUCT**

The Consultant is required to attach or prepare a Code of Conduct for Supervision Civil Works. A satisfactory code of conduct will contain obligations on all Consultants' Experts that are suitable to address the following issues, as a minimum. Additional obligations may be added to respond to particular concerns of the region, the location and the project sector or to specific project requirements. The code of conduct shall contain a statement that the term "child" / "children" means any person(s) under the age of 18 years.

The issues to be addressed include:

1. Compliance with applicable laws, rules, and regulations
2. Compliance with applicable health and safety requirements to protect the local community (including vulnerable and disadvantaged groups), the Consultant's Experts, the Client's personnel, and the Contractor's personnel, including sub-contractors and day workers (including wearing prescribed personal protective equipment, preventing avoidable accidents and a duty to report conditions or practices that pose a safety hazard or threaten the environment)
3. The use of illegal substances
4. Non-Discrimination in dealing with the local community (including vulnerable and disadvantaged groups), the Consultant's Experts, the Client's personnel, and the Contractor's personnel, including sub-contractors and day workers (for example, on

- the basis of family status, ethnicity, race, gender, religion, language, marital status, age, disability (physical and mental), sexual orientation, gender identity, political conviction or social, civic, or health status)
5. Interactions with the local community (ies), members of the local community (ies), and any affected person(s) (for example to convey an attitude of respect, including to their culture and traditions)
  6. Sexual harassment (for example to prohibit use of language or behavior, in particular towards women and/or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate)
  7. Violence, including sexual and/or gender based violence (for example acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion, and deprivation of liberty)
  8. Exploitation including sexual exploitation and abuse (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading behavior, exploitative behavior or abuse of power)
  9. Protection of children (including prohibitions against sexual activity or abuse, or otherwise unacceptable behavior towards children, limiting interactions with children, and ensuring their safety in project areas)
  10. Sanitation requirements (for example, to ensure workers use specified sanitary facilities provided by their employer and not open areas)
  11. Avoidance of conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favors, are not provided to any person with whom there is a financial, family, or personal connection)
  12. Respecting reasonable work instructions (including regarding environmental and social norms)
  13. Protection and proper use of property (for example, to prohibit theft, carelessness or waste)
  14. Duty to report violations of this Code

15. Non-retaliation against personnel who report violations of the Code, if that report is made in good faith.