MALAWI

MINISTRY OF EDUCATION



SKILLS FOR A VIBRANT ECONOMY (SAVE) PROJECT

PROJECT CODE: P172627

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR THE PROPOSED CONSTRUCTION WORKS FOR A 2-STOREY WORKSHOP BUILDING AND REHABILITATION OF GENERAL FITTING WORKSHOP & SANITARY FACILITIES AT SOCHE TECHNICAL COLLEGE

March 2025

Executive Summary

The Government of Malawi, through the Ministry of Education and the Ministry of Labour and Vocational Training, with funding from the World Bank, is undertaking the Skills for a Vibrant Economy (SAVE) Project. This initiative aims to construct and operate a 2-storey building at Soche Technical College. The project will take place on land owned by the college within its campus. The 2-storey building will accommodate four workshops dedicated to:

- Automobile Mechanics;
- Refrigeration and Cooling (RAC);
- Fabrication and Welding; and
- Electrical Installation and Electronics.

The construction of the project is expected to span 12 months, with an estimated budget of MK2,626,500,000.00, of which MK38,500,000.00 will be used to implement the ESMP. The project has an estimated workforce of 120 people. The main project activities will fall under the following 4 phases:

- **Planning and Designing:** This includes site selection, preparation of site plans and technical drawings, acquiring necessary approvals and permits for the project, and the preparation of this ESMP.
- **Construction:** Activities in this phase involve engaging the Construction Works Contractor, mobilizing and preparing the site, constructing a 2-storey building, rehabilitating the general fitting workshop and sanitation facilities, and managing waste.
- **Demobilization:** This phase encompasses the removal of temporary structures, construction machinery, and surplus construction materials, managing waste, and scaling down the workforce.
- **Operation and Maintenance:** Daily office work and learning activities, inspection and repair works, and waste management are part of this phase.

The project activities will take place at Soche Technical College located in Blantyre City, Southern Region of Malawi. Specifically, the College is situated on Pioneer Drive, bordered by Limbe Police Training College, Regional Forestry Office, and Wildlife Regional Office. The College is approximately 1.4 Km from Limbe town.

This Environmental and Social Management Plan (ESMP) has been prepared to identify the potential environmental and social risks and impacts of proposed Project activities and outline suitable mitigation measures to manage the associated risks and impacts. It maps out the Malawi laws and regulations and the World Bank policies applicable to the Project and describes the principles, approaches, implementation arrangements and environmental and social mitigation measures to be followed.

The potential environmental and social risks for the project activities were identified, and the key corresponding mitigation measures are presented in the list below.

Positive Impacts

- Increased employment opportunities
- Promotion of skills transfer in construction-related activities

- Increased access to skills development programs
- Improved national education standards

Negative Impacts

- Risk of poor/inadequate building designs
- Increased dust generation
- Disruption of classes due to increased noise and vibration disturbances
- Disruption of the provision of education services
- Disruption of play area
- Increased risks of GBV, SEA, and defilement
- Potential accidents to the community
- Increased incidences of child labour
- Temporary air quality deterioration
- Elevated noise levels from machinery and construction activities
- Increased occupational accidents and injuries on-site
- Discriminatory working conditions
- Infectious disease impact
- Generation of solid wastes, spills, and effluent
- Increase in electricity consumption
- Increase in water consumption
- Increased soil erosion and sedimentation
- Degradation of vegetation and habitat loss
- Risk of soil and water contamination
- Increased dust emission
- Increased risk of traffic disruption
- Increased risk of community health and safety
- Increased risk of water pollution
- Increased risk of electrical faults and fire hazard
- Battery disposal and hazardous material

Implementation of the ESMP will require shared responsibilities amongst the following stakeholders:

- STC: as the project proponent is responsible for ensuring compliance with all conditions of ESMP approval, and coordinating implementation of the project.
- The Contractor: will undertake construction activities in compliance with the environmental and social impact mitigation measures indicated in this ESMP.
- Blantyre City Council: Oversee monitoring the implementation of the ESMP.
- Ministry of Education (SAVE-PIU): has the role of ensuring that all the Environmental and Social Safeguards are implemented to satisfy the funding conditions.
- Construction Supervision Engineer/Consultant: will work with the PIU to supervise the works and ensure mitigation measures and any necessary corrective actions are being followed for the smooth execution of the works.
 - Malawi Environment Protection Authority (MEPA): has the responsibility of reviewing this ESMP and issuing an approval to proceed with the development. Further, MEPA will conduct inspections and monitor compliance with the implementation of the ESMP.

STC project implementation team, Blantyre City Council, SAVE-PIU, and MEPA are the main institutions that will be responsible for monitoring the implementation of this ESMP. Monitoring will be conducted through interviews, visual inspections, and review of records.

A separate Stakeholder Engagement Plan (SEP) has been prepared for the Project, based on the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. The SEP can be found on the following link: https://documents1.worldbank.org/curated/en/314131616158364147/pdf/Stakeholder-Engagement-Plan-SEP-Skills-for-A-Vibrant-Economy-Project-P172627.pdf.

Table of Contents

EXECUTIVE SUMMARY	II
LIST OF TABLES	VI
LIST OF FIGURES	VII
ABBREVIATIONS AND ACRONYMS	VIII
	г1
	2
0	
-	
o	
3 ENVIRONMENTAL AND SOCIAL PO	LICIES, REGULATIONS AND LAWS 7
3.1 RELEVANT MALAWIAN POLICY AND	LEGAL FRAMEWORK7
	8
3.3 NATIONAL ENVIRONMENTAL AND SO	CIAL ASSESSMENT AND PERMITTING 10
	SOCIAL STANDARDS AND WORLD BANK
GROUP ENVIRONMENTAL, HEALTH AND SAF	ETY GUIDELINES12
4 POTENTIAL ENVIRONMENTAL ANI	O SOCIAL RISKS, IMPACTS, STANDARD
	ANALYSIS16
4.1 ENVIRONMENTAL AND SOCIAL RISKS	S AND MITIGATION MEASURES 16
5 IMPLEMENTATION ARRANGEMEN	TS AND PROPOSED TRAINING44
5.1 IMPLEMENTATION ARRANGEMENTS.	44
	BUILDING45
	N BUDGET
	47
	47
6.2 GRIEVANCE REDRESS MECHANISM	47
7 COMMENTS ON THE INFRASTRUCT	TURE LAYOUT AND DESIGNS49
APPENDICES	50
APPHNINK THANDELLING II AND	hh.

APPENDIX 4: MINIMUM STANDARDS FOR NATIONAL COUNCIL FOR HIGHER EDUCA	TION
(NCHE)	
ANNEX 5: GBV MANAGEMENT PLAN	
ANNEX 6: CODE OF CONDUCT FOR CONTRACTOR	73
ANNEX 7: CHILD SAFETY MANAGEMENT PLAN	74
ANNEX 8: TRAFFIC MANAGEMENT PLAN	75
ANNEX 9: LABOUR MANAGEMENT PLAN	76
ANNEX 10: HEALTH AND SAFETY MANAGEMENT PLAN	78
ANNEX 11: EMERGENCY PREPAREDNESS AND RESPONSE PLAN GUIDELINES	80
APPENDIX 12: WASTE MANAGEMENT PLAN	83
APPENDIX 13: SCREENING FORM	
APPENDIX 14: SITE LAYOUT PLANS AND DESIGNS	
TABLE 3.1: MALAWI POLICY FRAMEWORKS	7
TABLE 3.2: LEGAL FRAMEWORK	
TABLE 3.3: RELEVANT WORLD BANK ESS	
TABLE 3.4: RELEVANT WORLD BANK ESS AND KEY GAPS WITH THE NATIONAL FRAM	
TABLE 4.1: ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION MEASURES	
TABLE 4.2: SCORING MATRIX	16
TABLE 4.3: DEFINITION OF SEVERITY OF IMPACTS	17
TABLE 4.4: EVALUATION OF POTENTIAL PROJECT IMPACTS	17
TABLE 5.1: IMPLEMENTATION ARRANGEMENTS	44
TABLE 5.2: PROPOSED TRAINING AND CAPACITY BUILDING APPROACH	46
TABLE 5.3: SUMMARY ESMP IMPLEMENTATION BUDGET	

List of Figures

FIGURE 1.1: PROPOSED SITE FOR THE CONSTRUCTION OF A 2-STOREY BUILI	DING 3
FIGURE 1.2: TOPOGRAPHIC MAP FOR THE PROPOSED PROJECT SITE	4
FIGURE 1.3: LOCATION MAP FOR THE PROPOSED PROJECT SITE	5
FIGURE 3.1: ESIA PREPARATION AND APPROVAL PROCESS IN MALAWI EI	RROR! BOOKMARK
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Abbreviations and Acronyms

AIDS Acquired Immune Deficiency Syndrome

BoQ Bill of Quantity

CPMP Child Protection Management Plan

CoC Codes of conduct

COVID-19 Coronavirus Disease 2019

CSC Construction Supervision Consultant

dB Decibel

DBO Director of Buildings

DCDO District Community Development Office
DESC District Environmental Subcommittee

DFO District Forestry Office
DGO District Gender Officer
DHS Director of Health Services

DLO District Labor Office

E&S Environmental and Social

EDO Environmental District Officer

EIA Environmental Impact Assessment

EMA Environment Management Act

ESCP Environmental and Social Commitment Plan ESIA Environment and Social Impact Assessment

ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan

ESS Environmental and Social Standards

FGD Focus Group Discussion FSC Feasibility Study Consultant GBV Gender-Based Violence

GBVMP Gender Violence Management Plan

GVH Group Village Headman

GRM Grievance Redress Mechanism

GRMC Grievance Redress Mechanism Committee

HIV Human Immunodeficiency Virus HSE Health Safety and Environment

KII Key Informant Interview

LMP Labor Management Procedures

MEPA Malawi Environmental Protection Authority

MERA Malawi Energy Regulatory Authority

MIE Malawi Institute of Engineers

NCHE National Council for Higher Education NCIC National Construction Industry Council

ODeL Open, Distance, and e-Learning
OHS Occupation Health & Safety

OHSMP Occupational Health and Safety Management Plan

PDO Project Development Objective PIU Project Implementation Unit PPE Personal Protective Equipment RAC Refrigeration and Cooling SAVE Skills for A Vibrant Economy SDG Sustainable Development Goal SEA Sexual Exploitation and Abuse SEP Stakeholder Engagement Plan

SHEA Sexual Harassment Exploitation and Abuse

SRWB Southern Region Water Board STC Soche Technical College SC Supervising Consultant

STI Sexually Transmitted Infection

T/A Traditional Authority

TEVETA Technical, Entrepreneurial, and Vocational Education and Training Authority

TMP Traffic Management Plan

WGRC Workers Grievance Redress Committee

WMP Waste Management Plan

1 Introduction

This Environmental and Social Management Plan (ESMP) is developed to support the environmental and social safeguards provisions for the construction of a 2-storey building and rehabilitation of the general fitting workshop and sanitation facilities at Soche Technical College (STC). The project is financed by the World Bank under the Skills for a Vibrant Economy Project (SAVE). The construction of the 2-storey building will increase education facility access, including for girls, directly contributing to enabler Number 5 of the Malawi 2063 Agenda. STC will be implementing the project activities as the project proponent. The 2-storey building will be constructed to house four workshops: (i)Automobile Mechanics; (ii) Refrigeration and Cooling (RAC); (iii) Fabrication and Welding; (iv) Electrical Installation and Electronics.

The nature of the project activities was categorised to be of low risk, hence the development of the ESMP was recommended. The development of this ESMP follows the World Bank Environmental and Social Framework (ESF), the EIA guidelines for Malawi, and prevailing Malawian laws and regulations. The objective of the ESMP is to assess and mitigate potential negative environmental and social risks and impacts of the project, consistent with the Environmental and Social Standards (ESSs) of the World Bank ESF and national requirements. More specifically, the ESMP aims to: (a) assess the potential environmental and social risks and impacts of the proposed project and propose mitigation measures; (b) establish procedures for the environmental and social screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures for managing and monitoring environmental and social issues related to the activities; (d) identify the staffing requirements, as well as the training and capacity building needed to successfully implement the provisions of the ESMP; (e) address mechanisms for public consultation and disclosure of project documents, as well as redress of possible grievances; (f) establish the budget requirements for the implementation of the ESMP; and (g) promoting sustainable practices that can yield lasting benefits for both the environment and local communities.

This ESMP should be read together with other plans prepared for the project, including:

- Stakeholder Engagement Plan (SEP);
- Environmental and Social Management Framework (ESMF);
- Labour Management Procedures (LMP);
- Environmental and Social Commitment Plan (ESCP);
- Chance Find Procedure:
- COVID-19 Guidelines for Schools in Malawi on Prevention and Management; and
- Project Implementation Manual.

Furthermore, the contractor's ESMP and specific tools will enhance the implementation of this ESMP. Specific tools include the Gender Violence Management Plan (GBVMP), Child Protection Management Plan (CPMP), and Traffic Management Plan (TMP). Grievance Redress Mechanism (GRM), Code of Conduct (CoC), COVID19 Construction Sites Prevention Guidelines, Waste Management Plan (WMP), and Occupational Health and Safety Management Plan (OHSMP)

The documents are accessible through this link: https://www.education.gov.mw/index.php/edu-resources/documents-and-publications/category/3-save-project

2 Project Description

STC has established a SAVE Project Institutional Implementing Team (IIT) that will be responsible for coordinating project activities at institutional level. The IIT's duties include day-to-day implementation, coordination, supervision, and overall management of project activities. SAVE Project scope consists of four components that contribute to the project development objectives, and these are:

- Component 1: Supporting Increased Access to Skills Development Programs in Higher Education.
- Component 2: Supporting Increase in Access to TEVET Skills Development.
- Component 3: Tertiary Education System Strengthening, Project Management, M&E and Communications.
- Component 4: Contingent Emergency Response

This section provides a comprehensive and detailed description of the project and its related activities.

2.1 Nature and Scope of the Project

The construction of a 2-storey building at Soche Technical College comprises a comprehensive infrastructure development project. This project encompasses a wide range of work, including feasibility studies, which consist of topography and geotechnical analyses, site surveys, and layout design. Additionally, it involves architectural and engineering designing. The project includes site preparation, surveys, and the layout of structures, followed by the construction of the main buildings, auxiliary structures, waste management structures, and plumbing works. Furthermore, the scope covers the connection of essential services such as telephone, electricity, and water, as well as furnishing, fittings, and the installation of equipment. The layout plan for the proposed workshop building is designed to accommodate multiple functional spaces with an efficient use of the area. The building also features essential facilities such as a storage room, and a janitor's room. The layout in annex 14 incorporates multiple washroom facilities, including dedicated spaces for gents (26 m²), ladies (24 m²), and staff (5 m²). The design provides gender-specific amenities for both staff and students, ensuring accessibility and convenience. Staff washrooms include 2 toilets (1 each for males and females), while students' facilities feature 5 toilets (3 for females and 2 for males), 3 urinals for males, 1 changing room for females, and 2 disability-friendly washrooms (1 each for males and females). A central veranda offers a connecting space, enhancing accessibility and circulation, while the structure includes spacious corridors and a ramp to ensure ease of movement. The 2-storey building will accommodate four workshops dedicated to:

- Automobile Mechanics:
- Refrigeration and Cooling (RAC);
- Fabrication and Welding; and
- Electrical Installation and Electronics.

Upon completion, temporary structures will be dismantled, and maintenance work will be conducted during the operation phase, ensuring the project's longevity and sustainability.

The project duration for planning and constructing a 2-storey building, at Soche Technical College, spans five years, from 2021 to 2026. It is expected that construction will start in May 2025 and

finish in May 2026. The cost for the project is estimated at MK2,626,500,000.00, of which MK38,500,000.00 will be for the implementation of this ESMP. The construction project will require about 120 workers, with 40% being female or male. There will be no campsite, the old site office will be used as a site office. Local workers will make up 80% of the workforce, while those from outside the project area will be accommodated in rented housing off-site. The contractor, along with project developers, will ensure that all rented accommodations comply with the World Bank Group's Environmental, Health, and Safety (EHS) Guidelines, which safeguard workers' health, safety, and dignity.

2.2 Spatial Location and Land Size

Soche Technical College is located in Blantyre City, Southern Region of Malawi. Specifically, the College is situated on Pioneer Drive, bordered by the Limbe Police Training College, the Regional Forestry Office, and the Wildlife Regional Office. The College is approximately 1.4 km from Limbe town. The proposed site for constructing the 2-storey building is within the College premises (-15.818027°, 35.045085°), at an altitude of about 1,190m above sea level. The site is adjacent to the tailoring workshop, electrical installation workshop, science laboratory, and mini hall.

The land designated for the project belongs to Soche Technical College and will not require additional land outside the campus. The estimated size of the land for the building's construction is 0.4 acres. The proposed site for constructing the 2-storey building at STC is depicted in Figures 1.1 and 1.2

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Figure 1.1: Proposed Site for the Construction of A 2-Storey building

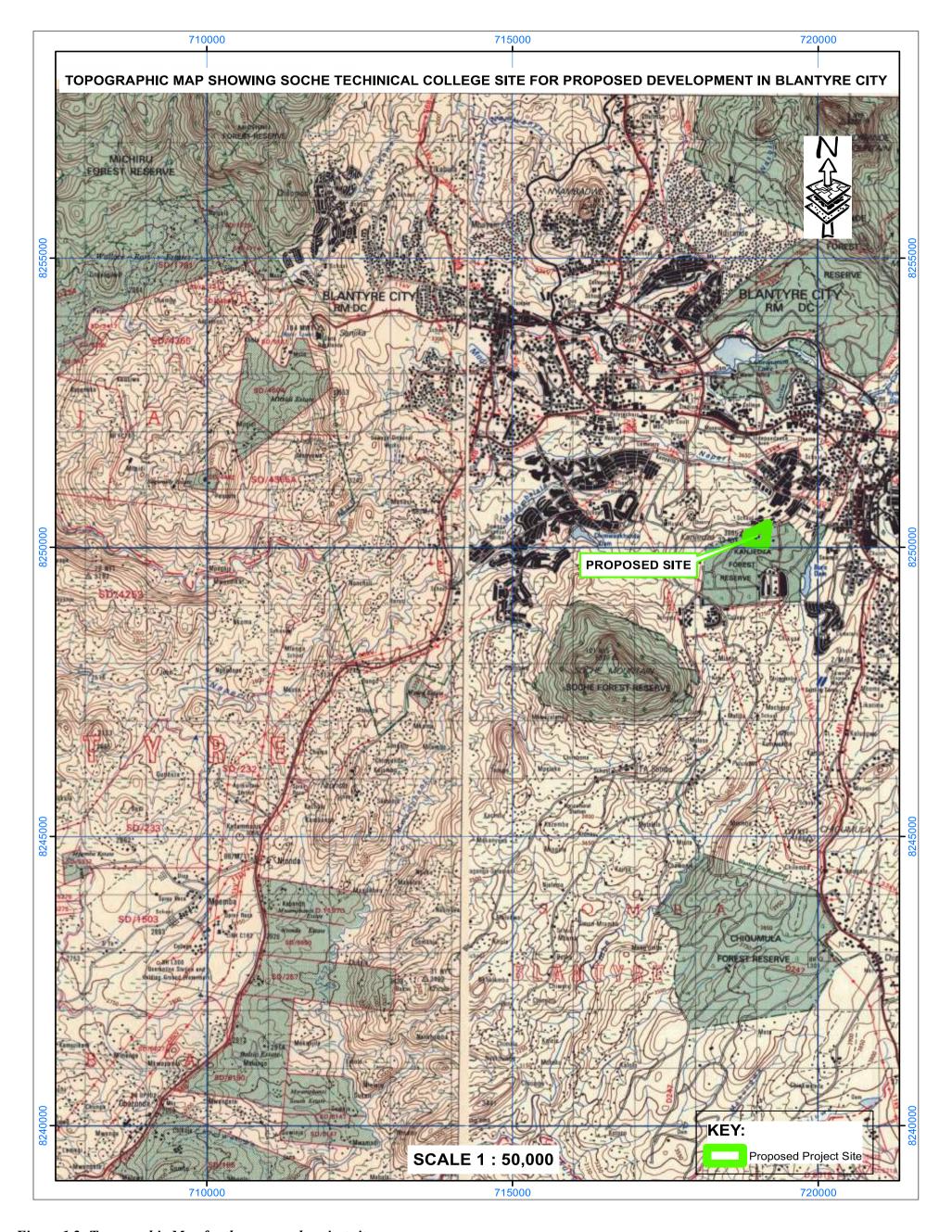


Figure 1.2: Topographic Map for the proposed project site

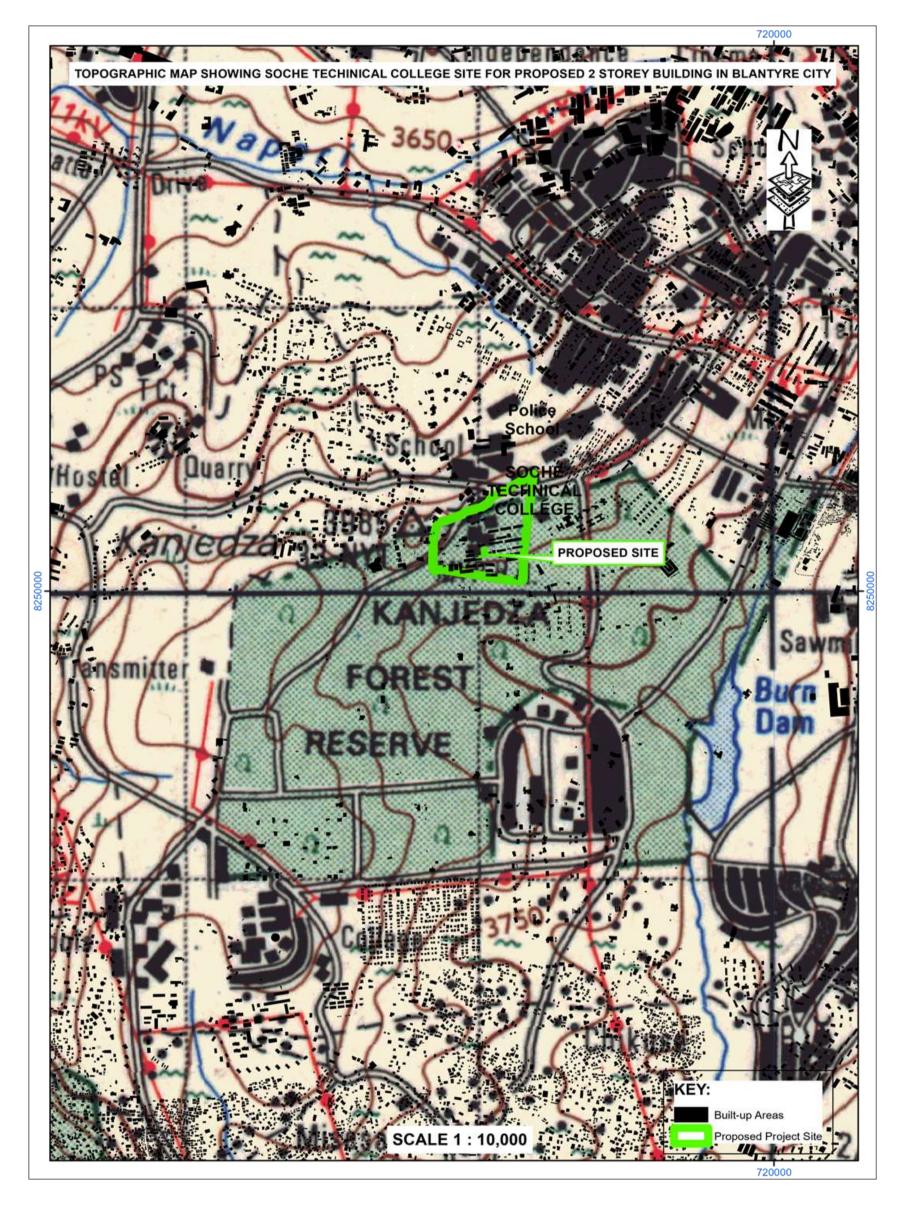


Figure 1.3: Location Map for the proposed Project Site

2.3 Project Activities

The description of the main project activities follows a lifecycle approach encompassing the construction and operation phases. The activities are divided into the following phases: planning and designing, construction, demobilization, operation and maintenance, and decommissioning.

2.3.1 Planning and Design Phase

A Project Design Consultant was identified to conduct topographical and geotechnical studies, prepare site plans and technical drawings, and develop budgets and timelines. The Design Consultant will oversee the recruitment of the Contractor and supervise construction activities to ensure alignment with the designs. The results from these studies provided basic information for this report.

2.3.2 Construction Phase

The construction phase will begin with the engagement of the Construction Works Contractor. The Contractor will proceed with the following activities: recruitment of construction workers, site clearance, mobilization of construction equipment and supplies, and the construction of a 2-storey building and associated structures.

2.3.3 Demobilization Phase

Demobilization will come after the completion of construction activities to vacate the site. Activities are expected to include scaling down of the workforce; removal of temporary structures such as perimeter construction fence, removal of construction machinery and surplus construction materials, cleaning the site, and disposal of wastes at a place authorized by the Blantyre City Council.

2.3.4 Operation and Maintenance Phase

During this phase, the Project Proponent will conduct maintenance activities including cleaning common areas, regularly removing rubbish, repairing broken items, and painting walls.

2.3.5 Decommissioning Phase

Currently, there are no decommissioning plans. However, if decommissioning is required, a decommissioning plan, including an Environmental and Social Management Plan (ESMP), will need to be prepared and approved by the authorities before the commencement of decommissioning activities.

3 Environmental and Social Policies, Regulations and Laws

This chapter provides an overview of the Malawi Government's policy and legal framework relevant to this project. It details the sectoral policies and legislation that establish the technical and legal guidelines for the sustainable construction and operation of a 2-storey building at STC in Blantyre. Additionally, it summarizes the applicable environmental and social standards set by the World Bank.

3.1 Relevant Malawian Policy and Legal Framework

Table 3.1 below outlines the relevant Malawi policy framework for the development project at STC.

Table 3.1: Key National Policy Requirements

S/N	Law	Description and Relevance to Project Activities
3.1.1	National Environmental Policy (2004)	The policy provides strategies for environmental and social planning, environmental and social impact assessment, environmental and social audits, and environmental and social monitoring, among others.
		The project will trigger the implementation of ESMP, environmental and Social audit, inspections, monitoring, and evaluation, so that adverse environmental and social impacts can be eliminated or mitigated, and environmental and social benefits enhanced. The Project activities will integrate environmental and social management and protection during project planning and implementation.
3.1.1	HIV & AIDS Policy (2012)	The National HIV and AIDS Policy identifies migrant workers and women as highly vulnerable to the transmission of HIV / AIDS, and other Sexually Transmitted Infections (STIs).
		The project will trigger the implementation of the HIV/AIDS workplace policy, code of conduct, awareness of prevention of STIs, distribution of condoms and follow-ups on the use. Therefore, STC will ensure Contractor prioritizes employing individuals from the surrounding communities to minimize the number of migrant workers. Additionally, they will organize HIV and AIDS sensitization meetings for construction workers and local communities and distribute HIV and AIDS Information, Education, and Communication materials.
3.1.2	National Gender Policy (2015)	The policy recognizes Gender-Based Violence (GBV), particularly against women, girls, and vulnerable groups, as a significant barrier to social well-being and poverty reduction.

The implementation of the project may lead to gender disparities and risks of sexual exploitation. To address this, the project will promote female empowerment, ensure equal opportunities and participation for both men and women, and enforce measures for the prevention of sexual exploitation and abuse (PSEA). Additionally, the project will raise awareness among stakeholders about gender-based violence (GBV), establish a code of conduct to be signed by all workers, and enforce a zero-tolerance policy for GBV and sexual exploitation and abuse (SEA).

3.2 Malawi Legal Framework

Table 3.2 below presents the legal framework relevant to the project.

Table 3.2: Key National Legislative Requirements

	Law Description and Relevance to Project Activities		
S/N 3.2.1	The Constitution Malawi (1994)	The Constitution of the Republic of Malawi (1995) is the supreme law of the land. Section 13 of the policy sets out a broad framework for sustainable environmental and social management at various levels in Malawi. Section 13 (d) of the Constitution provides that the state shall actively promote the welfare and development of the people of Malawi by progressively adopting and implementing policies and legislation aimed at managing the environment responsibly The Constitution of the Republic of Malawi binds all executive, legislative and judicial organs in Malawi and it is of paramount importance that the project complies with the constitution. To comply to the constitution: the project will implement fair treatment and non-discrimination, freedom of expression and participation, complying with EMA 2017 and other regulations, fair wages and decent working conditions and conflict resolution and grievance handling.	
3.2.2	Environment Management A (2017)	Section 9 of the Act gives powers to Malawi Environment Protection Authority (MEPA) to review and approve Environmental and Social Impact Assessments. In Section 32, part 3, the EMA requires the developer to take all reasonable measures for mitigating any negative effects, which could not reasonably be foreseen in the ESMP process, and to report to the Authority such effects and measures. The project will trigger environmental and social issues including, soil degradation, loss of tree, waste management, water and soil contamination, occupational safety, and	

S/N	Law	Description and Relevance to Project Activities
		community safety. To comply with the act, the project has prepared the ESMP, which was cleared by the MEPA. The ESMP will be implemented to prevent, reduce, and mitigate the impacts that the project will bring. In addition, the project will be implemented in an environmentally responsible manner to ensure protection of the environment and sustainable utilization of natural resources.
3.2.3	Occupational Safety, Health and Welfare Act (1997)	Section 66 provides for the procedure for accidents causing injury or death from doing his normal duties. Section 55 stipulates measures relating to confined space and section 56 provides for fire preventive measures. The implementation of the project will trigger safety issues, diseases and welfare of the workers. Contractor is to prepare and implement the Health and Safety Plans and provide adequate and relevant Personal Protective Equipment (PPE) for the workers.
3.2.4	Physical Planning Act (2016)	This Act provides for physical planning and orderly land development in urban and rural areas, aiming to preserve and improve amenities. It grants district councils the authority to oversee physical planning developments and mandates developers to obtain development permissions as specified in Sections 44 and 45. Section 46 (1) (a) outlines that development permission applications can be made to a local government authority or the Commissioner, depending on the jurisdiction. The implication of this Act is that the proposed project will have to ensure that the plans are approved by Blantyre District Council before commencing construction activities.
3.2.5	The Public Health Act (1948)	The Act mandates developers to establish sufficient sanitary and health facilities to prevent the adverse impacts of waste on public waters. The project may lead to challenges related to sanitation, disease, and waste management. As a result, the Client and the Contractor will implement appropriate measures, including providing adequate sanitation facilities, controlling dust, ensuring proper waste disposal, conducting medical check-ups for workers, restricting access to the project site, and installing warning signs.
3.2.6	The Gender Equality Act (2013)	Section 11 (1) stipulates that an appointing or recruiting authority in the public service shall appoint no less that forty percent (40%) and no more than sixty percent (60%) of either sex in the public service. It also provides for prevention of sexual harassment at work place.

S/N	Law	Description and Relevance to Project Activities
		The project will ensure that both sexes are given equal opportunities and where possible (depending on nature of works and availability of skilled personnel of either sex), the 40:60 rule should be observed. It also put in places safeguarding measures against sexual harassment.
3.2.7	National Construction Industry Act (1996)	Part VI—Section 20. (1) requires registration prior to carrying out business in the construction industry in Malawi. (2) prohibits a person from carrying out the business of a category of which he is not registered. STC is required to take necessary steps regarding selection of Construction Company as well as during construction to have quality structures and ensure that workers are protected. Furthermore the project will use cement blocks, as per NCIC
3.2.8	HIV and AIDS Prevention and Management Act (2018)	regulations Section 6 (1) prohibit discrimination on a basis related to HIV or AIDS. Section 7 gives rights to persons living with HIV to access medication necessary for anti-retroviral therapy or treatment.
		The Contractor will ensure that HIV / AIDS is not a precondition for securing employment. In addition, persons living with HIV / AIDS should be given opportunities to access medication.
3.2.9	Employment Act (2000)	The Act prohibits discrimination based on ethnicity, sex, political, language and religion differences; surety must also be made that all employees are subject to equal pay based on normal working hours.
		The Contractor should ensure payment of at least the minimum wage, fair labour practices, non-discrimination, non-discriminatory remuneration and prohibition of employment of children.

3.3 National Environmental and Social Assessment and Permitting

Malawi Environment Protection Authority (MEPA) is a government institution established through the Environment Management Act (EMA) No. 19 of 2017, as a principal agency for the protection and sustainable management and utilization of the environment and natural resources. One of the core functions for MEPA is to review and approve ESMPs, and other relevant environmental assessments in accordance with EMA.

According to the Guidelines for EIA in Malawi, the ESIA process begins with the screening stage where MEPA determines whether the proposed project is prescribed under List A (EIA is mandatory) or List B (may require an EIA).

Screening of the proposed project was conducted by MEPA, through the Environmental District Officer for Blantyre District Council, on 31st August 2022; where the proposed project was categorized under moderate risk. This was followed by prefeasibility studies where a project brief was prepared and submitted to MEPA, from which a conclusion was drawn that the proposed project requires an ESMP not an ESIA.

Table 3.3: Permit and approvals

No	Regulations/	Description	Reference	Issuing
	Standards/			Institution
	Approvals			
1	ESMP approval	The ESMP approval	EMA, 2017 and	MEPA
			EIA Guidelines	
			1997	
2	Workplace	During construction the sites will	Occupation Safety	Ministry of
	Registration	have to be registered and the	Health and	Labour
	Certificate	contractors must commit to abide	Welfare Act	
		by the occupational safety and	(1997)	
		health requirements of the		
		OSHWA		
3	Development	It is a requirement to obtain a	Physical Planning	Blantyre
	Permission	development permission issued by	Act, (2016)	District
		the local council's planning		Council/Cit
		committee		y Council
4	Water	This is a permit issued by the	Water Resources	National
	abstraction	National Water Resources	Act (2013)	Water
	Permit	Authority before abstraction of		Resources
		water for construction purposes. It		Authority
		allows individuals or companies to		
		abstract water from the		
		groundwater and surface sources		
5	Power	This is a contract agreement	Electricity	ESCOM
	Connection	between the developer and	(Amendment) Act	
	Contract	ESCOM for connection of the	(2016)	
		project to the electricity mains.		

3.4 World Bank Environmental and Social Standards and World Bank Group Environmental, Health and Safety Guidelines

The project will adhere to the World Bank Environmental and Social Standards (ESSs) and the World Bank Group Environmental, Health, and Safety Guidelines. According to these policies, the environmental and social risk of the project is categorized as low to moderate in the World Bank Environmental and Social Risk Summary (ESRS).

The proposed project falls under the Low-Moderate Environmental Risk Category for the following reasons;

- The project's potential environmental impacts will be limited to the construction site and nearby areas.
- The project will not involve significant water use or wastewater generation.
- The project's waste management plan will be adequate, and waste will be disposed of following local regulations.
- The project will not affect critical habitats.

The proposed project falls under the Low-Moderate Social Risk Category for the following reasons:

- The project will not involve displacement or resettlement of communities.
- The project's labour management plan is adequate, and workers' rights will be respected.
- The project will not pose significant community health and safety risks.
- The project's stakeholder engagement plan is adequate, and stakeholders will be engaged throughout the project lifecycle.

The World Bank's environmental and social standards applicable to project activities are summarized in Table 3.4 below.

Table 3.4: Relevant World Bank ESS

E&S Standard	Relevance	
ESS 1: Assessment and	ESS1 is relevant for the project because project activities are	
Management of	expected to pose moderate environmental and social risks such as	
Environmental and	dust pollution, and waste generation.	
Social Risks and		
Impacts		
ESS 2: Labour &	ESS2 applies to project workers, both local and migrant workers.	
Working Conditions	The project will implement Labor Management Procedures	
	applicable to the project in accordance with the requirements of	
	national law and this ESS.	
ESS 3: Resource	ESS3 is relevant as the project has the potential risk of generating	
Efficiency and	pollution to air, water, and land and consuming natural resources	
Pollution Prevention &	(e.g. sand, quarry, and wood resources) that may threaten people,	
Management	ecosystem services, and the environment at the local level.	
ESS 4: Community	ESS4 is relevant because the project activities will present	
Health & Safety	community health and safety risks such as (I) traffic and road safety	
	issues, (ii) creation of borrow pits, and (iii) dust pollution.	

ESS8: Cultural	Environmental and Social Standard 8 (ESS8) acknowledges that		
Heritage	cultural heritage serves as a bridge connecting the past, present, and		
	future through its tangible and intangible aspects. Communities view		
	cultural heritage as a dynamic representation of their evolving		
	values, beliefs, and knowledge.		
ESS 10: Stakeholder	The ESS10 is relevant in that there is a need to engage with		
Engagement &	stakeholders on this development project to improve the		
Information Disclosure environmental and social sustainability of projects and enha			
	project acceptance.		

The World Bank Group (WBG), and Environmental, Health and Safety Guidelines (EHS Guidelines) are implementation tools for WB's performance standards. The EHS Guidelines contain the performance levels and measures that are normally acceptable to the World Bank Group and they are generally considered to be achievable in new facilities at reasonable costs by existing technology.

Of special interest are the EHS guidelines for Construction and Decommissioning, Environmental Occupation Health and Safety, and Community Health and Safety. The Construction and Decommissioning guidelines provide specific guidance on prevention and control of community health and safety impacts that may occur during new project development, at the end of the project life cycle, or due to expansion or modification of existing facilities. On the other hand, Occupational Health and Safety guidelines provide guidance on reasonable precautions to implement in managing principal risks to occupational health and safety. The Community Health and Safety guidelines address some aspects of project activities taking place outside of the traditional project boundaries but related to the project operations.

The WB EHS guidelines are directly applicable to projects funded by the World Bank Group as such, they are directly applicable to STC project. The EHS Guidelines have therefore been used as guides for environmental and social impact mitigation management.

3.5 Gaps between the Malawi legal framework and the World Bank Environmental and Social Framework

The underlying principle in this ESMP is that project implementation should be based on the strictest requirements - Malawi legislation or World Bank Environmental and Social Standards. Table 3.5 provides details on the gaps that exist between national legal instruments and the World Bank ESS.

Table 3.5: Relevant World Bank ESS and Key Gaps with the National Framework

Hable 3.5: Relevant World Bank ESS and Key Gaps with the National Framework			
World Bank ESS	Malawi	Gaps Identified	How the gaps have
provisions	Legislation		been or will be
			addressed (if
700 1			applicable)
ESS 1: Assessment	Environmental	Environmental	To bridge this gap, an
and Management of	Management Act	Management Act (2017)	Environmental and
Environmental &	(2017)	and EIA Guidelines	Social Management
Social Risks and	EIA Guidelines	(1997) do not indicate	Framework (ESMF) has
Impacts	(1997)	the need to prepare	been integrated into the
		ESMF for projects. Only	SAVE project. This
		the ESIA process is	framework is essential
		discussed.	as the project poses
			potential environmental
			and social risks,
			including pollution,
			increased waste
			generation, higher water
			and energy
			consumption, and
			potential disturbances.
ESS 2: Labor and	The Labor	The national legislation	To address this gap,
Working	Relations Act	does not mention the	LMP has been
Conditions	(1996)	need to develop Labor	developed for the
	Occupational	Management	project to promote safe
	Safety, Health and	Procedures, including the	and healthy working
	Welfare Act,	requirement for the	conditions throughout
	(1997)	grievance redress	project implementation.
	Employment Act	mechanism to be	
	(2000)	established as early as	
		possible in the project	
		development phase.	
	Environment	The national legislation	
Prevention and	Management Act	mostly focuses on	project will follow
Resource	(2017);	pollution prevention and	provisions of ESS3 on
Efficiency	Environmental	less on aspects of	resource efficiency,
	Management	resource efficiency.	including encouraging
	(Waste		reducing recycling, re-
	Management and		using waste, efficient
	Sanitation)		use of raw materials;
	Regulations,		and optimization of
	(2008)		energy and water usage.
ESS 4: Community	Public Health Act	Issues of public health	Implementation of ESS4
Health and Safety	(1948);	are highlighted in the	as well as the World
	Occupational	public health acts, and	Bank Environmental,
	Safety, Health and	issues of safety and	Health and Safety

World Bank ESS provisions	Malawi Legislation	Gaps Identified	How the gaps have been or will be addressed (if applicable)
	Welfare Act	health are also	Guidelines addresses
	(OSHWA), 1997	highlighted in the	potential risks and
		OSHWA. However,	impacts on
		none of these tackle	communities.
		issues of community	
		safety.	
ESS 10:	EIA guidelines	The national legislation	The SAVE project has
Stakeholder	(1997), Local	addresses issues of	developed a stakeholder
Engagement &	Government Act	stakeholder engagement	engagement plan
Information	(1998)	but presents no provision	including a GRM for the
Disclosure		for the development of	project
		the GRM	

4 Potential Environmental and Social Risks, Impacts, Standard Mitigation Measures and Impact Analysis

4.1 Environmental and Social Risks and Mitigation Measures

The proposed construction activities at the STC campus in Blantyre will have both positive and negative risks and impacts. This section describes the potential risks and impacts and the proposed mitigation measures to ensure that all project activities, at every phase, are conducted in an environmentally and socially acceptable and sustainable manner. Table 4.6 below details the environmental and social risks and impacts, the corresponding mitigation measures, and the roles and responsibilities of the entities responsible for implementing and monitoring these measures.

4.2 Impact Evaluation

Project impacts are assessed to:

- Determine their overall significance
- Decide whether they are acceptable/require mitigation measures or whether they are completely unacceptable.

When evaluating each environmental and social risk and impact, the following factors were considered:

- Magnitude/extent: the measure in general degree, extensiveness or scale of each impact.
- **Significance:** a measure of the importance of a particular action on the environmental and social factor in the specific instance under consideration.
- **Probability of occurrence:** the likelihood of an impact occurring before mitigation measure is applied.
- **Duration:** the period over which an impact may occur and remain on site, from once-off to total life.
- **Reversibility:** a measure of whether the environment will repair or not when exposed to an impact

Each of the five factors considered under the above-stated criteria was graduated into 5 stage scales and assigned a value ranging from the smallest to the highest impact, which is 0 to 3 (Table 4.2). Then each impact is assigned one of the values under the five factors under consideration. The values can be positive or negative depending on whether they are beneficial or detrimental to the biophysical and socioeconomic environment. For example, a score of -3 means a negative impact of the highest degree of adversity while a score of +3 means a positive impact with the highest degree of potential benefit. If the impact is believed to be negligible or has no effect at all on a biological and social environment, it was then assigned a value of "0".

Table 4.1: Scoring Matrix

Extent or Ma	gnitude of impact	Score
Site	Impact confined to a small area within the project area	1
Local	Impact is limited within the radius of 3-5 km of the project area	2
Regional	The impact extends beyond the borders of the project area to influence	3
	other areas as a whole	
Significance of	of the impact	

Low	Where the impact has a relatively small effect on the biophysical and	1
	socioeconomic environment and is very difficult to detect it	
Moderate	Where the impact is or can be measured but does not alter biophysical	2
	and socioeconomic environmental processes	
High	The impact is very likely to alter biophysical and socioeconomic	3
	processes and hence needs mitigation to minimize or reduce its impact	
Probability of	f occurrence of the impact	
Possible	The impact may occur but with a probability of less than 35%	1
Probable	The impact is very likely to occur at a probability of between 35% and	2
	65%	
Definite	The impact will occur (unavoidable) at a probability of greater than 65%	3
Duration of in	mpact	
Short	Impact lasts for a period of less than 5 years	1
Long	Impact continues at any point for a period between five to ten years	2
Permanent	The impact never lasts once it occurs	3
Reversibility		
Reversible	The environment can repair itself naturally as a result of the impact	1
Reversible	The environment will require human input to repair	2
Irreversible	The impact will cause the environment never to repair	3

The values are then added to make a composite score (impact severity) for each impact using all five factors. The composite score is a proxy value that provides decision-makers and policymakers a basis for comparing the severity of impacts across different biophysical and socio-economic environments. For this project, severity is defined as shown in Table 4.3 below.

Table 4.2: Definition of Severity of Impacts

Positive Impact	•	Negative Impacts			
Score	Definition	Score	Definition		
+1 ≤ +5	Low	-1 ≤ -5	Low		
+6 ≤ +10	Medium	-6 ≤ -10	Medium		
+11 ≤ +15	High	-11 ≤ -15	High		

Table 4.3 shows the scoring of the anticipated impacts of the project on the biophysical and socioeconomic environment. Overall, a greater part of the negative impacts is of medium level while the positive impacts are medium to high.

Table 4.3: Evaluation of Potential Project Impacts

ID	Potential Impact Assessment	Magnitude	Significance	Probability	Duration	Reversibility	TOTAL SCORE	Severity before enhancem ent/mitiga tion measure	Severity after enhancem ent/mitiga tion measure
1.	ASSESSMENT OF	POSI	TIVE	IMP.	ACTS	5			

	Assessment	. Magnitude	Significance	Probability	Duration	Reversibility	TOTAL SCORE	Severity before enhancem ent/mitiga tion measure	Severity after enhancem ent/mitiga tion measure
	Positive Impacts Du						1.10	N. 6 11	TT' 1
	Increased employment opportunities	+3	+2	+3	+1	+1	+10	Medium	High
	Promotion of skills transfer in construction- related activities	+2	+2	+2	+1	+3	+10	Medium	High
1.2.	Positive Impacts Du	ring	Opera	ation a	and M	Iainte	nance l	Phase	
	Increased annual enrolment of students including girls	+3	+2	+2	+3	+2	+12	High	High
	Increased access to skills development programs	+2	+2	+2	+2	+2	+10	Medium	High
	Improved relations with other institutions that share a common interest	+3	+1	+2	+2	+2	+10	Medium	High
e	mproved national education standards	+3	+1	+2	+3	+2	+11	Medium	Medium
1.2.5 _I	mproved Health and Hygiene	+3	+1	+2	+3	+2	+11	Medium	Medium
	ASSESSMENT OF	NEG.	ATIV	E IM	PACT	S			
2.1.	Negative Impacts D	uring	Plan	ning a	nd De	esign	Phase		
	Risk of poor / inadequate building designs	-1	-2	-1	-2	-2	-8	Medium	Low
	Negative Impacts D		•	1			0) (1:	T
	Increased dust generation		-2	-3	-1	-2	-8	Medium	Low
	Risk of creation of borrow pits		-2	-2	-2	-2	-8	Medium	Low
	Disruption of classes due to	-1	-2	-2	-1	-2	-8	Medium	Low

ID	Potential Impact					h	ORE	Severity before enhancem	Severity after enhancem
	Assessment	Magnitude	Significance	Probability	Duration	Reversibility	TOTAL SCORE	ent/mitiga tion measure	ent/mitiga tion measure
	increased noise and vibration disturbances						-		
2.2.4	Increased safety and health risks of the workers and the public	-2	-3	-2	-1	-2	-10	Medium	Low
2.2.5	Risk of conflicts between contractor workers and communities	-2	-2	-1	-2	-1	-8	Medium	Low
2.2.6	Risk of theft of construction materials	-2	-2	-2	-1	-2	-9	Medium	Low
2.2.7	Increase in the risk of spread of communicable diseases including Cholera and COVID-19	-3	-2	-2	-1	-2	-10	Medium	Low
2.2.8	Increased risk of spread of HIV and AIDS and STIs	-3	-2	-2	-1	-2	-10	Medium	Low
2.2.9	Increased risk of gender-based violence, sexual exploitation and abuse and sexual harassment	-2	-2	-2	-1	-2	-9	Medium	Low
2.2.1	Disturbance of traffic along the access roads leading to the construction site		-2	-2	-1	-2	-9	Medium	Low
2.2.1	Extra burden on local services and facilities Negative Impacts D	-3	-2	-2	-1	-2 Maint	-10	Medium	Low

ID	Potential Impact Assessment	Magnitude	Significance	Probability	Duration	Reversibility	TOTAL SCORE	Severity before enhancem ent/mitiga tion measure	Severity after enhancem ent/mitiga tion measure
2.3.1	Increased solid waste generation (including e-waste)	-1	-3	-3	-1	-2	-10	Medium	Low
2.3.2		-1	-3	-2	-1	-2	-9	Medium	Low
2.3.3	Increased risk of pollution from liquid waste	-1	-2	-2	-1	-2	-8	Medium	Low
2.3.4	Increased occupational safety and health risks	-1	-3	-3	-1	-2	-10	Medium	Low

In general, the negative impacts have been evaluated to be of medium severity. However, proper implementation of mitigation measures is expected to lower the severity of the impacts. The positive impacts are of medium to high severity

Table 4.1: Environmental and Social Risks and Mitigation Measures

S/N	Activity	Risks and	Enhancement / Mitigation	Responsil	ole Entity	Managem	Monitorin
BITT	rictivity	Impacts	Measures	Enhance	Monitori	ent	g
		in paces	11204541 05	ment/	ng	cost/year	cost/year
				Mitigatio	8	(MK)*1	(MK)*1
				n			
1.	PLANNING	AND DESIGN I	PHASE				
1.1.	Positive Impa	ct during the P	lanning and Design Phase				
1.1.1.	 Procureme nt of Consultan cy services Surveys (Topograp hical, Geotechnical etc) Procureme nt of Contractor s 	Increased employment opportunities	 Advertise employment opportunities through many outlets Adverts should include statements encouraging women and youth to apply Provide equal employment opportunities to women and men who qualify (60:40 ratio of men to women). Provide contracts to employees with a clear scope of work, schedule and breakdown of payments. Adhere to the labour laws for Malawi throughout recruitment. 	STC	PIU	Througho ut Planning Phase	NA
1.1.2.	• Stakeholde r consultatio n	Improved project compliance to national environmenta l and social legislations	 Solicit views of the public and stakeholders through consultations to ensure that their concerns are considered in the Project's documents. 	STC	PIU	Througho ut Planning Phase	NA

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¹1 USD is equivalent to MWK 1,751¹ as of 12th December 2024

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio	Monitori ng	ent cost/year (MK)* ¹	g cost/year (MK)* ¹
				n			,
1.1.3.	• Resource use planning	resource management	of commencement date as well as inform them of the grievance mechanism and labour policy; and • Before commencing construction works, obtain approvals and certificates from relevant authorities that will include the Malawi Environment Protection Authority, National Water and Blantyre District Council. Develop strategies • for sustainable water management • Energy efficiency and renewable energy • Sustainable material use and sourcing • Land and soil conservation • Workforce and human resource optimisation • Policy, monitoring and compliance	STC	PIU	Througho ut Planning Phase	NA
2.	CONSTRUC	TION PHASE		<u> </u>	<u> </u>	I	l
2.1.	Positive Impa	acts during the (Construction Phase				
2.1.1.	Construction of a 2-storey	Increased employment opportunities	 Advertise employment opportunities through multiple media outlets; 	Contractor CSC DLO	STC PIU	1,500,000 for advertisin	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
	workshop building.		 Provide contracts to employees with a clear scope of work, schedule, and breakdown of payments; Provide equal employment opportunities to women and men that qualify in line with the National Gender Policy; Treat and pay workers fairly for the services rendered; and Adhere to the labour laws for Malawi throughout the recruitment. 		Supervisi ng Engineer Commun ity Leaders	g employme nt opportunit ies	
2.1.2.	• .	Increases demand for goods and services, stimulating local economies	 Conduct business forums and networking sessions to inform local entrepreneurs about available opportunities. Support waste recycling initiatives, sustainable packaging, and green innovations. Provide space and resources for startups and small enterprises near the project site. Allocate smaller contracts e.g., catering services to local businesses. 	Contractor CSC DLO	STC PIU Supervisi ng Engineer Commun ity Leaders	NA	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/	Monitori	ent cost/year	g cost/year
				Mitigatio	ng	(MK)*1	(MK)*1
				n			
	•	Improved Living Standards	Boosts local expertise by employing more local people	Contractor CSC DLO	STC PIU Supervisi ng Engineer Commun ity Leaders	NA	N/A
2.1.3.	Joint executio n of works between skilled and unskilled workforc e and strategic mentors hip during construct ion works of a 2- storey worksho	Promotion of skills transfer in construction-related activities	 Employ people from communities surrounding the project area to the extent feasible; Provide equal employment opportunity to both men and women; Maintain records of employment and training for all staff members employed and provide employees with certificates/official letters of employment. 	Contractor STC CSC	STC PIU Supervisi ng Engineer CSC Commun ity Leaders	The cost for advertisem ent included in 2.1.1	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
2.2	p building.	A. D C.	A. A. Diversi				
2.2.1.	Clearing site for construction	Loss of	 Replant trees where cut Limit operations to area of construction 	Contractor STC	STC PIU Supervisi ng Engineer Commun ity leaders	To be included in Contactors 'BOQ	N/A
2.2.2.	Resource utilization	Generation of solid waste during utilization of resources and removal of covered paths and the car park	 Accurate Material Estimation – Plan material requirements carefully to avoid overordering. Use Prefabricated Materials – Reduce on-site cutting and leftover materials. Optimize Design for Efficiency Implement modular construction to minimize waste. Reuse bricks, wood, steel, and concrete for other projects Separate waste into recyclable, hazardous, and organic categories for proper handling. Outline strategies for 	Contractor STC	STC PIU Supervisi ng Engineer Commun ity leaders Blantyre City Council	To be included in Contactors 'BOQ	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsible Entity		Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
			collection, sorting, and disposal. • Use Licensed Disposal Facilities • Install Waste Bins on Site – Clearly label bins for plastic, metal, wood, and hazardous waste.				
		Generation of hazardous waste	 Use eco-friendly paints, adhesives, and cleaning agents. Accurate Material Planning, order only the required quantities to prevent excess hazardous waste. Proper Storage & Handling – Store hazardous materials in sealed, labeled, and well-ventilated Use licensed hazardous waste disposal facilities. Maintain records of hazardous waste generation, handling, and disposal. Only use qualified authorized contractors to transport and dispose of hazardous waste. 	Contractor	STC PIU Supervisi ng Engineer Commun ity leaders Blantyre City Council, MEPA	To be included in Contactors 'BOQ	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
	·	Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
2.2.3.	 Transporting construction materials along the 500m of unpaved access road within the campus, from the institution's entrance to the construction site. Excavation, backfilling, and cement mixing 	Increased dust generation Increased risk of uncovering archaeologica l, cultural, or historical artifacts.	 Observing speed limits (20Km/hr) when moving on unpaved roads within the campus; Dust suppression by water spraying on unpaved access roads; Erect barriers around work sites to break or reduce wind and dust movement; Handle sand and cement properly to limit dust generation. 	Contractor	STC PIU Supervisi ng Engineer Commun ity leaders	To be included in Contactors BOQ	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	le Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
2.2.4.	Excavation	Increased loose soils which may lead to soil erosion and sedmentation	 Excavation activities must be limited to construction areas; Backfill excavated areas immediately after excavation to limit exposure of loose soils; Use excavated soil to fill eroded sites around the campus and communities; and Dispose of the excavated soil at sites recommended by the District Council. Install silt fences, mulching, and grass replanting to reduce soil loss. Construct sediment traps, retention ponds, and proper drainage channels. 	Contractor	STC PIU Supervisi ng Engineer Commun ity leaders, EDO	To be included in Contactors BOQ	N/A
		Increased risks of dust & air pollution	 Excavate in phases, avoiding unnecessary soil disturbance. Spray water on exposed soil, use windbreaks to reduce dust. 	Contractor STC	STC PIU Supervisi ng Engineer Commun ity leaders	To be included in Contactors BOQ	N/A
		Habitat Destruction &	Conduct assessments before excavation.Only one tree will be removed	Contractor STC	STC PIU	To be included in	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
		Biodiversity Loss	10 trees will be repainted		Supervisi ng Engineer Commun ity leaders	Contactors BOQ	
2.2.5.	• Sourcing of constructio n materials, such as river sand and quarry, for constructio n activities from suppliers in Njuli to STC, located 17.1 km along the M3 road via Zomba road.	creation of	 Source materials from licensed suppliers; and Rehabilitate all borrow pits using recommended methods in consultation with Blantyre City Council. 	Contractor STC	STC PIU Supervisi ng Engineer Commun ity Leaders	N/A	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	le Entity	Managem	Monitorin
	, and the second	Impacts	Measures	Enhance ment/	Monitori ng	ent cost/year	g cost/year
				Mitigatio n		(MK)*1	(MK)*1
2.2.6.	 Movement of construction vehicles to and from the site passing within 40 metres of existing functional structures, such as tailoring and electrical installation workshops, science lab and mini hall. Operation of noisy construction machinery (pokers, 	Disruption of classes due to increased noise and vibration disturbances	 Minimize needless vehicle movement; Limit the number of noisy activities; Use appropriate and well-maintained noise mufflers on vehicles and machinery; Provide ear protection materials for the workers in noisy areas and ensure their correct usage; Provide site barricade fencing; Restrict noisy activities to when classes are not in session; Identify alternative routes to the construction sites; Provide own storage for materials and accommodation for workers and Adhere to the code of conduct for construction workers. 	Contractor	STC PIU Supervisi ng Engineer Commun ity leaders	To be included in Contactors 'BOQ	N/A

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib		Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
	jackhamm ers, and drills)						
2.2.7.	 Movement of construction vehicles to and from construction site Operation of construction machinery on-site Handling of hazardous chemicals 	Increased safety and health risks for the workers and the public	 Conduct daily toolbox talks before the commencement of work; Train workers on prevention and managing incidents; Sensitize communities on project components including construction machinery; Install warning and safety signage in all high-risk areas of the project; Workers and visitors to the site must wear protective gear; Restrict unauthorised public access to the construction site; Store and handle hazardous materials as prescribed by the manufacturer; and Provide first aid kit and train workers on its application. 	Contractor	STC PIU Supervisi ng Engineer DHS	10,000,00 0for PPE	2,500,000
	•	machine failure, which may result in Workplace injuries.	Regular inspection, servicing, and timely replacement of machine parts.	Contractor	STC PIU Supervisi ng Engineer	NA	NA

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
		Production delays and financial losses.	 Use sensors, alarms, and diagnostic tools to detect issues early. Ensure operators are trained on machine handling, emergency stops, and troubleshooting. 		DHS		
		competence of operator,	 Provide certification-based training before allowing operators to handle machinery. Conduct periodic practical tests and refresher courses. Assign experienced supervisors to monitor new or less experienced operators. Ensure compliance with industry-specific competency standards 	Contractor	STC PIU Supervisi ng Engineer DHS	NA	NA
		poor housekeeping and administrative systems	 Assign responsibilities for cleaning workspaces. Proper Waste Management by implementing color-coded bins and scheduled waste disposal Ensure tools, materials, and hazardous substances are stored properly. Display clear instructions for 	Contractor	STC PIU Supervisi ng Engineer DHS	NA	NA

S/N	Activity	Risks and	Enhancement / Mitigation	Responsil	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
2.2.8.	Social interacti on between Contacto r workers and community members	Risk of increased conflicts between workers and communities	handling spills, fire hazards, and emergency exits. Conduct regular workplace inspections to enforce cleanliness standards. Assess employee and system performance to identify gaps and provide training Ensure adherence to ISO, OSHA, and local regulatory frameworks Recruiting people from surrounding areas; Contractor Workers' Code of Conduct should be included and signed in individual employee contracts; in the language they understand; Sensitize workers on the risks of indulging in extra-marital affairs; and The GRM should be flexible enough to accommodate uptake of grievances from local communities.	Contractor	STC PIU BCC	N/A	2,000,000
2.2.9.	• Presence of Contract	Increased risk of theft of	• Employ more security guards to enhance security capacity at the construction site;	Contractor Communit y Leaders	STC PIU	N/A	Included in 2.2.4

S/N	A	Activity	Risks and		Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
			Impacts		Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
		or workers and members from the surround ing commun ities on the construct ion site	construction materials	•	Provide access control to then construction site with 24hr surveillance; Provide support to local/community policing efforts i.e., providing whistles and airtime; Report and prosecute all cases of theft; and Include Community Policing Officers in Grievance Redress Committees.		Commun ity Leaders		
2.2.10.	•	Interacti on between Contacto r workers and commun ity members / STC staff and students	Increased risk of spread of communicabl e diseases including Cholera and COVID-19		Conduct sensitizations on COVID-19 and other communicable diseases including Cholera to workers, STC Staff, students, and communities; Provide hand-washing and proper waste disposal facilities.	Contractor DHS Communit y Leaders	STC PIU	5,000,000 for sensitizati on and sanitation equipment	Included in 2.2.4

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
2.2.11.	• Interact on between Contact r workers and commulity member / ST staff ar students	of spread of HIV and AIDS and STIs		Contractor DHS	STC PIU Commun ity Leaders	2,000,000 for condoms ² Cost for sensitizati on included in 2.2.7	Included in 2.2.4
2.2.12.	Interact on between Contact r workers and commutity member / ST	of gender- based violence (GBV), sexual exploitation and abuse (SEA), and sexual harassment	 Conduct awareness campaigns on GBV, SH, and SEA risks to workers, STC staff, students, and surrounding communities; Institute and implement a GBV/SEA/SH sensitive GRM for reporting and management of cases; Ensure that the Code of Conduct is signed and understood by all workers in line with issues of 	Contractor STC DGO DSWO	STC PIU Supervisi ng Engineer Commun ity Leaders	4,000,000 for awareness campaigns	Included in 2.2.5

² The cost for condoms has been subsidised based on the assumption that condoms can be obtained from Public Health Facilities: Clinics and hospitals, NGOs, Community Health Workers and Local Government Offices.

S/N	Act	ivity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		·	Impacts	Measures	Enhance ment/	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
					Mitigatio n		(MK)**	(IVIK)***
		aff and addents		 GBV, SH, and SEA; Provide separate restrooms and change room facilities for men and women; and Provide signage/information on GBV/SH/SEA in local language. 				
2.2.13.	nt co ioi ve to fro	nstruct	Disturbance of traffic along the access roads leading to the construction site.	 Schedule movement of construction activities to avoid peak traffic hours; 	Contractor Communit y Leaders	STC PIU Supervisi ng Engineer Commun ity Leaders	To be included in Contractor s' BOQ	Included in 2.2.4
2.2.14.	tic we ST wh the alr ex uti	orks at	Extra burden on local services and facilities		Contractor	STC PIU Supervisi ng Engineer Commun ity Leaders	To be included in Contractor s' BOQ	Included in 2.2.4

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
	es will increase: Vate r dema nd for const ructi on activi ties e.g. Mort ar mixi ng and concr ete curin g V Powe r dema nd for		maintenance, ensuring no disruption to the school's supply.				
	opera						

S/N	Activity	Risks and	Enhancement / Mitigation	Responsil	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
	tion of electr ic powe red tools and mach inery						
3.			ENANCE PHASE				
3.1.	•		ration and Maintenance Phase		Т	1	
3.1.1.	Daily teaching and learning activities	annual enrolment of students including girls	 development of staff members to advance their teaching skills; Allocating resources strategically based on students' needs and demands; Simplifying enrolment processes. 	STC	NCHE Ministry of Educatio n (MoE)	To be included in the STC operationa l budget	To be included in the STC operationa l budget
3.1.2.	Operation of the following workshops; ✓ Automo bile	access to skills development	 Ensure that well-qualified members of staff are employed; Provide quality learning resources; Integrate modern learning technologies in all buildings; Ensure gender equity in student 	STC	TEVET A MoE	To be included in the STC operationa l budget	To be included in institution al budgets

S/N	Activity	Risks and	Enhancement / Mitigation	Responsil	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
	Mechani cs; ✓ Refriger ation and Cooling (RAC); ✓ Fabricati on and Welding ; and ✓ Electrica l Installati on and Electroni cs.		 intake; Partner with local companies to provide internships and on-the-job training opportunities for students; Implement practical assessment methods to evaluate the skills and competencies of students regularly. 				
3.1.3.	Daily teaching and learning activities	Improved national education standards	 Regularly conduct maintenance of the building and associated structures to uphold them at high standards; Provide opportunities for staff to improve their knowledge and skills; and Use up-to-date teaching methods and technologies. 	STC	SOCHE MoE	N/A	To be included in institution al budgets
3.1.4.	Operatio n of rehabilit	• Improved Health	Implement routine cleaning schedules;Conduct regular inspections and	STC	Ministry of Health (MoH)	N/A	To be included in

S/N	Activity	Risks and Impacts	Enhancement / Mitigation Measures	Responsib	Monitori	Managem ent	Monitorin
				ment/ Mitigatio n	ng	cost/year (MK)*1	cost/year (MK)*1
	ated sanitatio n facilities	and Hygiene	prompt repairs to maintain high standards of cleanliness and functionality.				institution al budgets
3.2.	Negative Imp	acts during Ope	eration and Maintenance Phase				
3.2.1.	 Presence of staff and students for daily teaching and learning activities Repairin g of infrastru cture 	Increased solid waste generation (i)	 Provide appropriate containers across the work areas for waste disposal and easy collection; Implement sensitization campaigns on the consequences of indiscriminate waste disposal; and Sell or recycle metal waste to tinsmiths or vendors for reuse or resale. Dispose non-hazardous waste to Council's approved disposal site. 	STC	BDC BCC, MEPA	To be included in STC's operational budget	To be included in institution al budgets
3.2.2.	Utilizati on of the electrical worksho p and RAC worksho p	Increased production of E-waste and batteries	 Select equipment that can be repaired, upgraded, or repurposed instead of replaced. Train employees on waste segregation, safe handling, and recycling protocols. Extend the lifespan of computers, power tools, and electrical components. 	STC	BDC BCC, MEPA	To be included in STC's operationa l budget	To be included in institution al budgets

S/N		Activity	Risks and	Enhancement / Mitigation	Responsil	ole Entity	Managem	Monitorin
		·	Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
				 Clearly labelled bins to separate electronic waste. Partner with Certified E-Waste Recyclers for proper processing of circuit boards, cables, and batteries. Handle mercury, lead, and lithium batteries using approved hazardous waste disposal methods. 	gmc.	MEDA		
			Contribution to global warming and ozone depletion	Encourage adherence to Montreal Protocol, Kigali Amendment, and national environmental laws.	STC	MEPA, EAD	To be included in the STC's operational budget	To be included in institution al budgets
3.2.3.	•	Use of worksho p materials /equipm ent Utilizati on of existing building electrical	Increased risk of occupational safety and health risks including electrical faults	 Health and safety procedures must be written and posted in sections of the 2-storey workshop building; Placing fire-fighting equipment/mechanisms in strategic positions of the 2-storey workshop building; Carrying out regular inspections of electrical installations and possible accident spots; Carrying out maintenance of 	STC	BDC MoL- OSH Departm ent	To be included in the STC's operationa l budget	To be included in institution al budgets

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib	ole Entity	Managem	Monitorin
		Impacts	Measures	Enhance	Monitori	ent	g
				ment/	ng	cost/year	cost/year
				Mitigatio		(MK)*1	(MK)*1
	installati ons		faulty electrical installations and equipment; and • All stairs must have handrails to protect against accidents.	n			
3.2.4.	• Use of toilets	Misuse of toilets which lead to blockages, water wastage, poor sanitation, and plumbing system failures.	 Place instructional posters in restrooms, indicating what should and should not be flushed (e.g., "Do not flush wipes, sanitary pads, or solid waste"). Periodic Reminders – Reinforce awareness through workshops, meetings, or notices on proper use of toilets Install waste bins for sanitary products, wipes, and other nonflushable items. Ensure access to toilet paper that is biodegradable and safe for flushing. Routine inspections of blockages or leaks early. Immediate Repairs of any malfunctions, leaks, or clogged pipes promptly to prevent damage. Monitor water usage by installing low-flow or dual- 	STC	Blantyre DHO, Ministry of Health	To be included in the STC's operationa l budget	To be included in institution al budgets

S/N	Activity	Risks and	Enhancement / Mitigation	Responsib		Managem	Monitorin
		Impacts	Measures	Enhance ment/ Mitigatio n	Monitori ng	ent cost/year (MK)*1	g cost/year (MK)*1
			flush toilets to control excessive water				
	TOTAL EST	IMATED COST	Γ			23,500,00 00	4,500,000

5 Implementation Arrangements and Proposed Training

5.1 Implementation Arrangements

The implementation of the ESMP and the Monitoring Plan necessitates shared responsibilities among various stakeholders. Table 5.1 below summarizes the roles of the parties and their respective responsibilities.

Table 5.1: Implementation Arrangements

		entation Arrangements
•	Responsible Party	Roles and Responsibilities
•	Soche	• Ensure that the Project complies with the Government of Malawi's
	Technical	environmental laws and regulations;
	College	Coordinate/ undertake environmental and social management
	2011-80	awareness capacity-building activities for STC staff and students.
		Orientation and awareness training for STC staff.
		• Establish a Grievance Redress Mechanism, as described in the SEP, to
		receive and facilitate resolution of affected peoples' concerns,
		complaints, and grievances about the Project's environmental and social
		performance
		• Ensure that the ESMP approval and all required approvals and national
		have been obtained before commencement of construction activities on the site;
		• Ensure that MEPA has been notified of the date on which construction
		activities will commence before commencement of any activity;
		• Ensure that the recommendations of the ESMP are included in the
		construction works contract; and
		• Ensure that the operation of the project is undertaken in line with the
		requirements of the operational phase ESMP.
•	Contractor	• Ensure implementation of all applicable environmental mitigation measures during all works on site;
		 Ensure that all employees, suppliers, agents, etc. are fully aware of the
		environmental requirements detailed in the ESMP;
		Conducting capacity building for the construction workers about the
		implementation of the ESMPs;
		• Inform the Project Proponent and MEPA that environmentally
		conditions on the site deteriorate; and
		• Conduct instructions issued by Inspectors from various institutions,
		including MEPA, required to comply with the ESMP.
•	Blantyre	• District offices, including those for Environment, Labour, Gender,
	District	Youth, and others, must collaborate with the Project Proponent in
	Council	monitoring the implementation of the ESMP.
		Provide permits where necessary
•	MoE– SAVE	• Provide support, oversight, and quality control to field staff working on
	PIU	environmental and social risk management.
		Planning and implementation of ESMP.

 Responsible 	Roles and Responsibilities
Party	
• Supervision Engineer/ Consultant	 Ensuring that the social and environmental protection and mitigation measures in the ESMP are incorporated into the site-specific Environmental and Social Action Plans. Supervise and monitor the progress of contractors' activities. Guide construction teams in conducting subsequent monitoring and reporting and in undertaking corrective options. Ensure the submission of periodic environmental and social management and monitoring reports to the World Bank. External communications with other implementing partners, government ministries and agencies, and non-government organisations on matters of mutual interest related to environmental management under the project development Collaborate with the PIU to supervise the works and ensure that mitigation measures and any necessary corrective actions are being followed for the smooth execution of the project. Development of a monitoring tool or checklist based on the ESMP and guided by the project's physical layout. Develop a monitoring program for the works, targeting specific project working sites, material sites, sensitive environments, social areas, etc.
• MEPA	 Prepare monthly site meetings to involve the Contractor, Client and Stakeholders. Prepare monthly reports and continuously communicate with the Contractor, Client, Authorities, and Stakeholders as situations require. The Consulting Engineer will convene monthly meetings for progress reporting by the Contractor and the supervision team Reviewing this ESMP and issuing approval to proceed with the development; and Conduct inspections and monitor compliance with the implementation of the ESMP during the construction and operation phase of the project.
Community Leaders	 Issue permits Taking part in the management and monitoring of specific enhancement/ mitigation measures

5.2 Proposed Training and Capacity Building

The capacity-building programs will empower stakeholders to effectively monitor construction and related activities to ensure compliance with national and international laws, regulations, and guidelines. These programs will specifically target the STC Project Implementation Team (PIT),

STC staff members, contractors, and community leaders responsible for implementing the mitigation measures outlined in this ESMP report.

Table 5.2 details the necessary trainings, their target audiences, the responsible institutions, and the phases required for implementing these trainings.

Table 5.2: Proposed Training and Capacity Building Approach

Level	Responsibl	Audience	Topics/Themes that May Be	Estimated
	e Party		Covered	Cost (MK)
Local/sit e level	SAVE PIU	Project Staff, Construction Supervision Engineer/ Consultant STC PIT Contractor(s)	 Environmental and Social Safeguards ESMP implementation GBV, SHEA and Child Labour GRM Risk Management Emergency preparedness and response Cholera and COVID-19 mitigation Labour relations 	5,000,000
Commu nity level	STC PIT, Contractor	GRM Committee, STC staff, Contractor workers Community Leaders GRM Committee	 Environmental and Social Safeguards ESMP implementation Grievance Redress Mechanism (GRM) Code of Conduct Grievance Redress Mechanism (GRM) GBV, SHEA and Child 	1,500,000
TOTAL E	CSTIMATED (members	GBV, SHEA and Child Labour	10,500,000

5.3 Estimated ESMP Implementation Budget

Table 5.3 lists estimated cost items for the implementation of the ESMP, which have been included in the overall project budget.

Table 5.3: Summary ESMP Implementation Budget

S/N	Activity/Cost Item		Potential Cost/ Year (MK)
1.	Implementation of site-sp specific plans	pecific ESMPs and other site-	22,000,000

2.	Capacity building training (venue, travel, refreshments,	10,500,000
	etc.)	
3.	Software for data	1,000,000
	collection/supervision/monitoring/grievance redress	
4.	Printing of awareness-raising materials/grievance redress	2,000,000
	materials	
5.	Cost of obtaining clearances or permits (EIA scrutiny and	1,000,000,
	workplace registration)	
6.	Travel budget for environmental and social staff site visits	2,000,000
	TOTAL	38,500,000

6 Stakeholder Engagement, Grievance Redress Mechanism, Disclosure and Consultations.

6.1 Stakeholder Engagement

The Stakeholder Engagement Plan (SEP) for the SAVE Project was crafted in alignment with the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. This plan can be accessed through the World Bank's official repository at https://documents1.worldbank.org/curated/en/314131616158364147/pdf/Stakeholder-Engagement-Plan-SEP-Skills-for-A-Vibrant-Economy-Project-P172627.pdf.

Guided by ESS10 and SAVE Project SEP, a wide range of stakeholders were consulted during the development of this ESMP. The consultations were conducted through Key Informant Interviews (KII) and Focus Group Discussions (FGD) to incorporate different stakeholders' input at national, district, and community levels. In addition, STC students and members of staff were also consulted and were used for conducting stakeholder consultations. A detailed account of the issues raised during stakeholder consultations is presented in Appendix 1 and registered in Appendix 2.

6.2 Grievance Redress Mechanism

STC has established a functional Grievance Redress Committee comprising STC staff members, community representatives, and the Police. For an effective Grievance Redress Mechanism (GRM), STC ensures the following five main steps are undertaken in handling grievances:

- a) Grievance Reporting and Recording: the Grievance Redress Committee provides multiple channels for grievance reporting:
 - Face-to-face: Complaints may be presented verbally or in writing to the committee members.
 - Grievance boxes: strategically placed around the STC campus.
 - Dedicated GRM phone number with WhatsApp and text messaging capabilities. The number is 0999443363.
 - Dedicated email address at moseskaluza@gmail.com
- **b)** Responding to and Resolving Complaints: Complainants receive a response within two weeks (14 days) of submitting their complaint, regardless of whether a decision has been reached or not. The Safeguards Specialist at STC is responsible for provision of feedback. The complainant is notified upon receipt of their complaint and informed of the following:

- i. If the complaint is relevant, and the actions planned to be undertaken.
- ii. If the complaint is dismissed, reasons are provided, their right to recourse, and avenues for further engagement.
- iii. If a decision is delayed, a progress report is provided along with an estimated conclusion date.
- c) Assessment of Received Complaints: Upon receiving a complaint, an assessment determines its relevance to the project. Non-project-related complaints are redirected appropriately. Project-related grievances are reviewed by the GRM committee, with follow-ups to verify claims. Outcomes are communicated to the complainant within 14 days.
- d) Resolution and Closure: Where a resolution has been made and the complainant accepts the resolution, the complainant shall be required to sign the resolution and closure section in the Grievance Resolution Agreement Form. A member of the GRM committee (preferably Chairperson or Secretary) shall also be required to counter sign. This shall signify that the complaint or grievance which was presented, has been fully discussed and closed. In case of a referral, the same members shall be required to sign signifying that the case was not closed and has been referred to another entity.
- e) Registry and Monitoring: All grievances are logged in a publicly accessible register for easy tracking and monitoring, providing: i. Number of complaints received. ii. Number of complaints resolved and unresolved. iii. Mediation outcomes.

This database helps in improving the GRM and addressing project impacts. Each complaint is assigned a unique reference number for tracking, with recorded timelines: a) Date of complaint. b). Proposed corrective actions (if applicable); c). Date of closure; and d). Date of response to complainant.

The construction of the 2-storey building at Soche will follow the GRM procedures outlined above.

7 Comments on the Infrastructure Layout and Designs

The overall design of the two-story building, which will house four specialized workshops for Automobile Mechanics, Refrigeration and Cooling (RAC), Fabrication and Welding, and Electrical Installation and Electronics, adheres to the local government building guidelines and standards as developed by the National Construction Industry Council (NCIC) and the National Council for Higher Education (NCHE) Architectural Metric Handbook. Additionally, it incorporates considerations for the various disasters that Malawi periodically encounters.

Nevertheless, the Consultant has identified environmental and social issues that warrant further review and consideration. These issues are outlined below:

Site Layout Recommendations

Reference is made to the site plan. It is recommended for;

- 1. The access road to the southern side of the proposed workshop building is to be assessed and equipped with appropriate road traffic management control devices i.e. signs and signals, road markings, and barricades to ensure road safety due to anticipated heavy vehicle movement stemming from the nearby workshop activities such as tire fitting, wheel alignment and automobile mechanics within the nearby bay's vehicle workshop.
- 2. The access road to the eastern side of the workshop building is to be equipped with traffic calming measures i.e. (humps, and speed cushions as well as zebra crossing) to minimize accident risks from pedestrians and vehicles.

Ground floor observations

- 1. PWD facilities have not been included in the workshop building.
- 2. Stick welding facilities/rooms are located further away from the fire exit however stick welding is higher fire risk activity compared to battery charging interchanging the two facilities would shorten the fire escape route for stick welding.
- 3. The workshop building lacks industrial showers and emergency shower/eye wash stations with foot pedals.
- 4. The workshop ancillary facilities do not include showers.
- 5. Janitor has been proposed for location on a high-traffic section/ route; nearby of corridor posing a high risk of competing demands and time. It is proposed that it should be relocated near the ladies' change room.
- 6. The workshop building, access to the storage rooms, is available only through the tire fitting bay. For better space maximization and operational efficiency, it is advisable to provide additional access through the corridor.

Top Floor Recommendations

1. The top floor design lacks sanitary facilities.

The comments and recommendations regarding the site layout, ground and top floor design can be reviewed in Appendix 7.

APPENDICES

Appendix 1: Consultation Summaries

Stakeholder	Issues during consultation	Recommendation
National Level Stakeholders Project Implementation Unit (PIU) Ministry of Labour TEVETA Malawi Environmental Protection Authority (MEPA) College Management	Non-compliance of the current Acts, Guidelines and Regulations governing environment management by contractors	

Stakeholder	Issues during consultation	Recommendation
		 ✓ Issues of compensation • In conducting the assignment, the consultant should use the current Acts, Guidelines, and Regulations governing environment management. • There is a need to include new regulations from sectors such as Health, Forestry, and Lands. The regulations in the health sector include the Covid 19 and Cholera regulations. For the Forestry sector, it is important to include the Forestry Act
	• Coordination	 Amendment (2019). The new Land Acquisition Act should also be referenced for the assignment; The most important stakeholders for the project are the Ministry of Labour and the Ministry of Education because they are the ones implementing the SAVE project; The consultant should work hand in with the college project team so that matters arising
	Accidents and community safety	should be dealt with together. The consultant should consider potential damages likely to occur to existing structures adjacent to the site; • Importance of speed limits when construction vehicles pass near existing buildings;
	• Increase in electric and water bills	• The Contractor should use their water and electricity or pay upfront before using their utilities, as they have experienced challenges with other contractors;
	Limited space for the project	• Some structures like the old car park and the library may be demolished to pave the way for the new construction works.

	Recommendation
District Level Stakeholders	contractor to use all the relevant policies and environmental and social safeguards. These should be included in the Contactor's and workers' codes of conduct. The Consultant should remember learners as one of the relevant key stakeholders. The construction activities should be climatesmart. Site assessments are supposed to be done before choosing an appropriate position for new structures. A key factor to consider when positioning new structures is distance from perimeter fence and access roads (not less than 3 metres from perimeter fence and not less than 7 meters from access roads). Site drawings (done by a certified architect) must be presented to the city council for approval. The contactor must abide by NCIC standards. During construction inspection is done at every level (substructure/ superstructure) and inspection cards are issued to progress to the next stage.

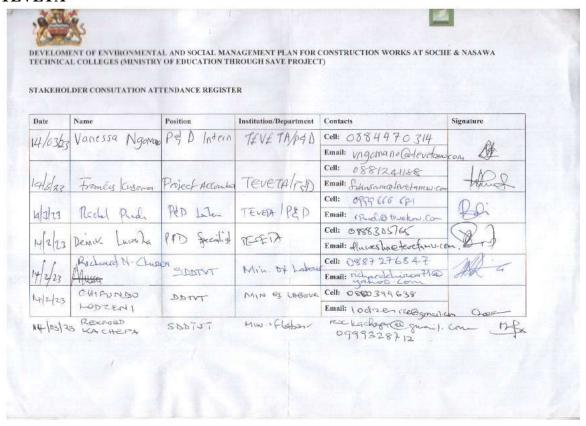
Stakeholder	Issues during consultation	Recommendation
STC Students	Disruption of classes	 The contractor will need to present a work plan showing specific tasks to be done. These will determine when noise levels will be high and therefore propose further actions such as using other classrooms that are a bit far from the construction site The possibility of the contractor executing his / her duties during holidays Use of machinery that does not produce excessive
	Prevention of accidents	noise The contractor will need to form a barricade/fence School toilets will be renovated before
	Sanitation during construction	construction works to increase the number of working toilets
	Community and workers safety	The contractor will need to form a barricade/fence to minimize dust emission into surrounding areas
	Disruption of important routes	 The contractor will need to provide dust suppression mechanisms Speed limits will need to be established Students will have to use an alternative route to access other areas within the college compound. This alternative route is available
Community members	 Employment Opportunities – Will the project prioritize local hiring and fair wages? Community participation 	 Employment opportunities to consider people from surrounding areas. It will not be proper to engage unskilled labour from elsewhere The project will present business opportunities to the surrounding communities

Stakeholder	Issues during consultation	Recommendation
	Spread of communicable diseases including STI, COVID-19 and cholera	 The nearest health facility to Soche Technical College is Kanjedza Police Dispensary. This health facility is facing several challenges including: Space limitations where under 5 clinic and the general public health occur under one roof; Limited funding which sometimes result in shortage of certain drugs Electricity problems Lack of proper sanitary facilities such as toiles (two toiles present and they are not divided according to gender) Erratic water supply Non-functional taps

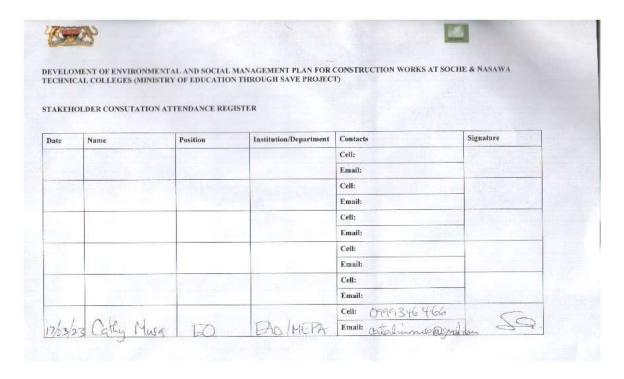
Appendix 2: Consultation Registers



TEVETA



MALAWI ENVIRONMENTAL PROTECTION AUTHORITY



BLANTYRE DC

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STAKEHOLDER CONSUTATION ATTENDANCE REGISTER

SOCHE & BT COUNCIL

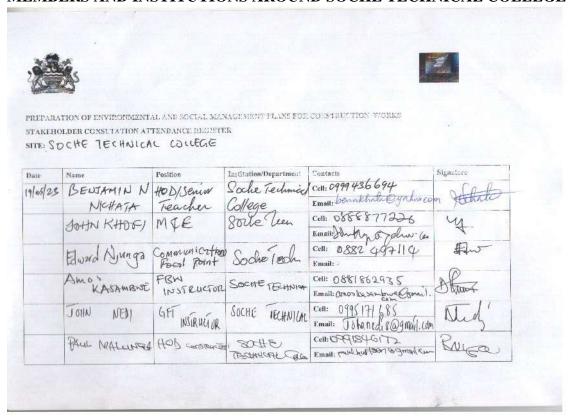
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SOCHE TECHNICAL COLLEGE MANAGEMENT

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STUDENTS, COLLEGE MANAGEMENT, COMMUNITY LEADERS, COMMUNITY MEMBERS AND INSTITUTIONS AROUND SOCHE TECHNICAL COLLEGE







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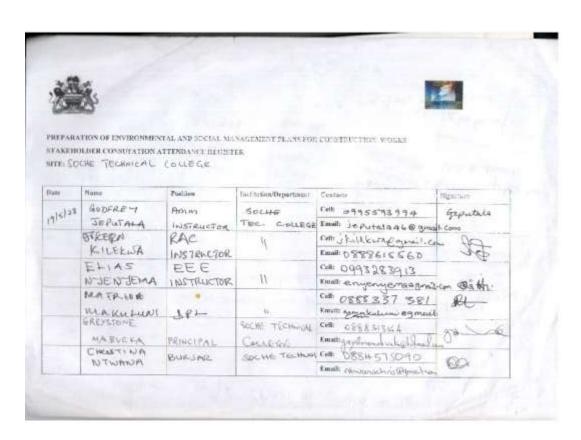




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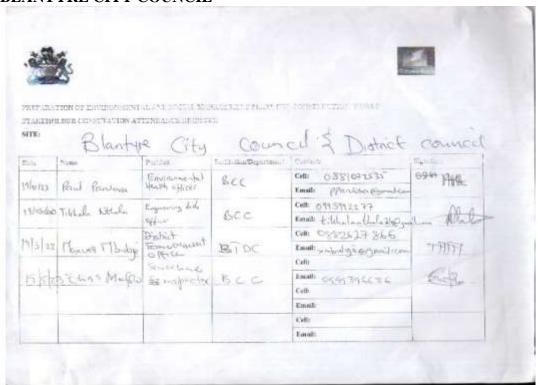
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Appendix 3: ESMP CONSULTANT

Name	Proposed Position and	Key Role	Experience
	Qualification		
KEY EXPERT			
Kent Kafatia,	• MSc. in Water and Waste	ESMP Expert	36 years' ESIA
Snr	Engineering		Experience
R. Eng.	BSc. in Chemical Engineering		
	(Environmental)		
	BSc. in Environmental Science &		
	Forestry		
	BSc. in Forestry		
	PGD. in Integrated Environment		
	and Water Management.		

Appendix 4: Minimum Standards for National Council for Higher Education (NCHE)

ACCOMODATION

- 1. There shall be separate accommodation for male and female students
- 2. Minimum ceiling height of 2.8 m
- 3. Total floor area per student;
 - i) single room (for postgraduates): 8.00 square meters;
 - ii) double student room or cubicle, 12.00 square meters;
 - iii) three or four student room, 15.00 square meters;
- 4. Every living room in the hall should have access to outside light with vents in the walls to provide permanent ventilation
- 5. Where self-catering accommodation is provided the kitchen area shall have suitable cooking equipment, refrigeration and floor space of 1m2 per student occupant
- 6. There shall be appropriate laundry and drying facilities
- 7. Appropriate furniture and fittings for the rooms:
 - i) a bed (80 X 190 cm) with free space between the beds of over 75 cm.
 - ii) lockable closet
 - iii) reading table and chair for each occupant
- 8. Establish mechanism /systems to provide accommodation information to student by keeping information available

PHYSICAL FACILITIES

Drawings and design of different buildings

- 1. Drawings of buildings shall be approved by the relevant local authority
- 2. Buildings shall be built according to approved plans.
- 3. Building shall have minimum ceiling height of 2.6 m.
- 4. Building completion and stability certificate issued by competent authorities shall be produced.
- 5. Alterations or extensions, if any, shall be approved and a certificate of occupation shall be issued for a newly constructed or altered buildings.
- 6. The design and layout of classrooms, laboratories, and library buildings shall promote safety, cleanliness, maintenance, health, lighting, and comply with laws governing physical facilities, particularly with respect to fire, safety, and sanitation.
- 7. The buildings, classrooms, equipment, furniture, grounds, instructional tools, support systems, instructional facilities, machinery, and other physical requirements shall be appropriate and contribute to the achievement of the institution's objectives.
- 8. Immovable equipment, instructional tools, and machinery shall be properly installed and maintained.
- 9. In particular, HEIs shall provide adequate and appropriate physical spaces to meet the teaching requirements of the curriculum, and the following standards shall be observed:
 - i) Lecture Rooms shall be adequate in number and size. The sitting capacity for lecture rooms shall be at the rate of 1m2/student.
 - ii) Lecture theatre/auditorium sitting capacity shall be based on the rate of 0.75m2/student.
 - iii) Seminar rooms: Each department should have a seminar room for tutorials.

- iv) Classrooms, lecture theatres and seminars rooms shall have adequate lighting, ventilation and audio-visual aids such as video screen, television, white / black Board, LCD projector/ overhead projector
- 10. HEIs shall provide suitable office space for all categories of staff. Deans and Heads of Department and support staff working laboratories shall have offices with appropriate administrative equipment.
 - i) Office space for academic: a space measuring 12m2 should be allowed per staff. Sharing of office space should be kept to a minimum of two academic staff.
 - ii) HEIs should provide Common Rooms for each of the following: Academic staff, Non-academic staff and Students.
- 11. All buildings shall provide for special needs access
- 12. Physical facilities shall be safe for the public, free from structural failure, cracking and dilapidation.

Facilities support for persons with physical challenges

HEIs shall ensure that design and construction of various buildings and facilities shall accommodate universal access. The following specifications shall be adhered to:

- 1. Pavements gradients of footpaths shall not exceed 1:20 except for short ramps. On excessively long gradients there shall be horizontal rest areas at regular intervals.
- 2. Entrance doors and corridors shall allow for turning of a wheel chair.
- 3. Toilets -should have toilets fitted with special facilities for wheel chairs and whose doors open outside

ICT Infrastructure

- 1) HEIs shall have appropriate ICT infrastructure that includes computers with appropriate software and internet access.
- 2) HEIs shall have an ICT plan for the purpose of ensuring reliability, privacy, safety and security

Security of the premises

- 1) All buildings shall have adequate, reasonable and easily accessible means of escape in the event of emergency.
- 2) All means of escape shall be properly labelled, maintained and kept free from any obstruction
- 3) The buildings and premises shall be fenced or have security guards' coverage
- 4) There shall be adequate and well serviced firefighting equipment.
- 5) Fire Drills shall be conducted periodically to staff and students
- 6) Assembling area in case of emergency and fire exit procedures shall be available and known to all

Laboratories

- 1) HEIs shall have suitable teaching laboratories, hospitals, workshops and studios for natural and applied sciences, computer science and languages.
- 2) Laboratory facilities shall provide enough room for a laboratory office, instructional workstation, storage and preparatory rooms of reasonable size (7 m²) each.

- 3) Laboratory facilities shall be properly located in relation to other facilities to allows for easy access
- 4) For computer laboratories and rooms, HEIs shall provide software and internet access as required for various programmes.
- 5) There shall be fume cupboards and fume hoods in the preparation and storage rooms
- 6) There shall be standard table top electrical service outlets for the instructor's table and for each pair of students
- 7) There shall be water supply system for firefighting.
- 8) Minimum Capacity of a laboratory shall be based on the rate of 1.9m2 per student.
- 9) Laboratory environment shall also facilitate the demonstration and observation of procedures.
- 10) There shall be separate research laboratories for postgraduate students and academic staff.
- 11) Laboratory waste shall be disposed-off through Malawi Bureau of Standards waste disposal guidelines

WATER AND SANITATION

Water supply

- 1) HEIs shall have adequate, safe and clean water supply
- 2) HEIs shall have water reservoirs capable of meeting 24 hours demand.
- 3) HEIs involved with livestock rearing shall have separate storage facility to cater for the needs of the animals

Wastewater collection, treatment and disposal system

- 1) HEIs shall have wastewater collection, treatment and disposal system.
- 2) There shall be evidence of approval by the relevant local authority responsible for water and effluent disposal systems.
- 3) HEIs shall drain and dispose of surface water in a manner as to cause the least inconvenience or nuisance to the public
- 4) HEIs shall have master plan that illustrates:
 - i) the location of the existing and proposed buildings of the institution
 - ii) The layout of all waste and soil drain pipes, sewers, septic tanks and storm water drains.

Toilets and Bathroom

HEIs shall maintain clean and hygienic water closets, urinals, wash hand basins and bathrooms as follows:

- i) One water closet for 15 20 male students
- ii) One water closet for 10- 15 female students
- iii) One Urinal for 20 -25 male students
- iv) One bath or shower for 15 -20 male students
- v) One bath or shower for 15 -20 female students
- vi) Toilets for female and male staff
- vii) Sanitary disposal facilities

Student support services

HEIs shall provide adequate facilities and services that specifically support student academic life as follows:

Accommodation

- 1) There shall be separate accommodation for male and female students
- 2) Minimum ceiling height of 2.8 m
- 3) Total floor area per student
 - i) single room (for postgraduates): 8.00 square meters;
 - ii) double student room or cubicle, 12.00 square meters;
 - iii) three or four student room, 15.00 square meters;
- 4) Every living room in the hall should have access to outside light with vents in the walls to provide permanent ventilations
- 5) Where self-catering accommodation is provided the kitchen area shall have suitable cooking equipment, refrigeration and floor space of 1m2 per student occupant
- 6) There shall be appropriate laundry and drying facilities
- 7) Appropriate furniture and fittings for the rooms:
 - i) a bed (80x190cm) with free space between the beds of over 75 cm.
 - ii) lockable closet
 - iii) reading table and chair for each occupant

Establish mechanism /systems to provide accommodation information to student by keeping information

Annex 5: GBV Management Plan

Prevention of GBV is a multifaceted effort which should deal with or focus on:

- 1. women empowerment or agent of change
- 2. women participation and capacity to influence decision making
- 3. women economic empowerment
- 4. increased access to sexual and reproductive health and rights
- 5. incorporate men and boys in efforts (as perpetrators, victims and agents of change)
- 6. social gender norms and behaviour transformation (challenging gender stereotyping)

The specific prevention measures have been included in a GBV Management plan to ensure the implementation of actions in this regard and to allow for close monitoring of the contractor.

Activities	Action party	Responsibilities
Stakeholder engagement	STC PIU; District Social Welfare Office (DSWO)	 Identify GBV service providers in the area. Identify vulnerable groups within the community. Inform community members about the details of the project and the GBV risks associated with the project. GBV training including what to do in case of grievance.
GBV training for GRC, contractor and staff, consultants and adjoining community members	STC PIU; Contractor; DSWO	 Training and sensitisation of all workers associated with the project on GBV and how the project can contribute to GBV risks. Training and sensitisation of adjoining communities on GBV risks, channels to report GBV incidents and services available for GBV survivors.
Codes of conduct signed and understood	STC PIU; Contractor	 Ensure requirements in the CoCs are clearly understood by those signing. Have the CoCs signed by all those with physical presence in the site. Train construction workers on the behaviour obligation under the CoCs.
Handling GBV complaints (including support of survivors)	GRM	 Grievance Redress Committees to ensure confidential complaint uptake mechanisms are in place. The GBV cases should be immediately reported to the Police (Victim Support Unit), District Social Welfare Office, psychosocial support institutions working in the project area or district.
Provision of separate, safe and easily accessible facilities for women and men working on the site	STC PIU; Contractor	Ensure construction sites have separate facilities like toilets and/or bathrooms for men and women.
Monitoring and reporting	STC PIU; Contractor; DSWO	Selection of monitoring indicators (such as: No. of reported cases of GBV; Resolved cases and time it took to address the complaints, No. of workers that have attained GBV training

courses; No./percentage of workers that have signed CoC and No. of GBV cases that were referred to the GBV service provider).
 Ensure new risks are uncovered and mitigated.

Annex 6: Code of Conduct for Contractor

Contractors under the SAVE project will be required to prepare a code of conduct that they shall follow when undertaking construction works. These rules shall be part of the assessment criteria when selecting the contractor. A satisfactory code of conduct will contain obligations on all project staff (including sub-contractors and day workers) that are suitable to address the following issues, as a minimum. Additional obligations may be added to respond to concerns of the region, location, project sector, or specific project requirements. The issues to be addressed include:

- 1. Compliance with applicable laws, rules, and regulations of the jurisdiction.
- 2. Protection of children (including prohibitions against abuse, defilement, or otherwise unacceptable behaviour with children, limiting interactions with children, and ensuring their safety in project areas).
- 3. Sexual harassment (for example to prohibit use of language or behaviour, in particular towards women or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate).
- 4. Violence or exploitation (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favours or other forms of humiliating, degrading or exploitative behaviour).
- 5. Compliance with applicable health and safety requirements (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).
- 6. The use of illegal substances.
- 7. Non-Discrimination (for example based on family status, ethnicity, race, gender, religion, language, marital status, birth, age, disability, or political conviction).
- 8. Interactions with community members (for example to convey an attitude of respect and non-discrimination).
- 9. Sanitation requirements (for example, to ensure workers use specified sanitary facilities provided by their employer and not open areas).
- 10. Avoidance of conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favours, are not provided to any person with whom there is a financial, family, or personal connection).
- 11. Respecting reasonable work instructions (including regarding environmental and social norms).
- 12. Protection and proper use of property (for example, to prohibit theft, carelessness or waste).
- 13. Duty to report violations of this Code; and
- 14. Non-retaliation against workers who report violations of the Code, if that report is made in good faith.

The Code of Conduct should be written in local and plain language and signed by each worker to indicate that they have:

- Received a copy of the code and that it was explained to them.
- Acknowledged that adherence to this Code of Conduct is a condition of employment; and
- It is understood that violations of the Code can result in serious consequences, up to and including dismissal or referral to legal authorities.

Annex 7: Child Safety Management Plan

In School Communities, there will be many instances that might expose children and young people to construction workers, which may lead to child safety risks. These forms of child risks could be in the form of SAE, accidental harm, physical abuse, Psychological/emotional Abuse and online abuse.

Type of Risk	Management of Risk	Action Party
Recruitment of inappropriate personnel	 Child safety training Reference checking Pre-screening interviews Criminal history checks Working with children checks Probation period 	Contractor
Grooming	 Code of conducted Training for all staff, volunteers, leaders etc. 	Contractor, District Social Welfare Office
Use of images or video of children and young people without parental consent	 Code of Conduct. Training for all staff, volunteers, leaders etc. Photo and video policies. 	Contractor
Misconduct unreported and failure to address behaviour surrounding misconduct	 Training for all staff, volunteers, leaders etc. Code of conduct and child protection policies. Procedures and protocols responding to misconduct. 	Contractor
Unsafe environment leading to occurrence of accidents	 First aid kit must be readily available on site. Appoint first aid officers. Conduct risk assessment of all construction activities and identify risks management options. 	Contractor

Annex 8: Traffic Management Plan

The following section guides contractor when developing a Traffic Management Plan, which aims to minimise traffic congestion, enhance road safety, and ensure smooth transportation operations.

A8.1 Assessment and Planning

- **Traffic Impact Assessment (TIA)**: Conduct a thorough TIA to understand the potential impact of construction activities on local traffic patterns. This should include peak traffic times, road capacities, and key congestion points.
- **Stakeholder Consultation**: Engage with local authorities, community leaders, and stakeholders to discuss the proposed traffic management measures and obtain necessary approvals.

A8.2 Traffic Control Measures

- **Temporary Traffic Signals and Signs**: Install temporary traffic signals and signs around the construction site to guide drivers and pedestrians. Clearly mark detour routes and alternative pathways.
- **Road Closures and Diversions**: Plan and schedule road closures and diversions during off-peak hours to minimize disruption. Provide advance notice to the public about these changes.
- **Dedicated Construction Routes**: Designate specific routes for construction vehicles to minimize their impact on general traffic. Ensure these routes avoid high pedestrian areas and critical college access points.

A8.3 Construction Logistics

- Staging Areas: Establish staging areas for construction materials and equipment to reduce on-site congestion. These areas should be located away from main traffic routes.
- **Scheduled Deliveries**: Coordinate the timing of deliveries to avoid peak traffic hours. Use smaller, more frequent deliveries if necessary to reduce the impact on traffic flow.

A8.4 Pedestrian Safety

- **Pedestrian Pathways**: Create safe and clearly marked pedestrian pathways around the construction site. Use barriers to separate pedestrians from construction activities.
- **Crossing Guards**: Deploy crossing guards at critical points to assist pedestrians, especially during peak hours.

A8.5 Public Communication

- **Information Dissemination**: Use multiple channels (e.g., local radio, social media) to keep the public informed about construction schedules, road closures, and alternative routes.
- **Signage and Maps**: Provide clear signage and maps around the college to help drivers and pedestrians navigate the area during construction.

A8.6 Monitoring and Adjustments

- **Traffic Monitors**: Deploy traffic monitors to observe and report on traffic conditions in real-time. Use their feedback to make immediate adjustments to traffic control measures.
- **Regular Reviews**: Conduct weekly reviews of traffic management measures and make necessary adjustments based on feedback from stakeholders and observed traffic patterns.

A8.7 post-construction

• **Site Restoration**: Repair any road surfaces or pedestrian pathways damaged during construction.

Feedback and Evaluation: Collect feedback from the community and stakeholders on the effectiveness of the traffic management plan. Use this feedback to improve future projects.

Annex 9: Labour Management Plan

The construction phase of the project requires the employment of numerous skilled and unskilled workers. There are risks of unequal or unfair treatment in hiring and during implementation, of forced and child labour, health and safety at work, among other risks. To effectively implement the ESMP, the Contractor is to develop a Labour Management Plan (LMP) that will help define and manage all labour- related matters during the implementation of this Project.

It is expected that the project will engage the following categories of workers, as defined by IFC PS 2: employees, contracted workers (consultants and contractors), community workers, migrant workers and primary supply workers.

Objectives

The purpose of the Labour Management Plan is:

- To promote safety, health, and welfare at work;
- To promote the fair treatment, non-discrimination, and equal opportunity of project workers;
- To protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age), migrant workers, contracted workers, and primary supply workers, as appropriate;
- To prevent the use of all forms of forced labour and child labour;
- To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law;
- To provide project workers with accessible means to raise workplace concerns.

Measures Needed

The Contractor will address these risks by undertaking site specific risk assessments and incorporating mitigation measures for the identified risks into the program specific environmental, social, health, and safety management plans. See the table outlining potential mitigation measures at the end of this annex.

In addition, the Contractor shall establish and implement the following:

- i. Grievance Redress Mechanism especially the WGRM to ensure workers have ability and opportunity to lodge complaints or concerns (refer to Annex 9).
- ii. Workers Code of Conduct to manage the environmental and social risks related to the workers and the works including Trafficking in Persons, sexual exploitation, sexual abuse and sexual harassment (refer to Annex 6)

Monitoring & Guidance:

The LMP applies to all project workers, whether full-time, part-time, temporary, seasonal, or migrant. The LMP is applicable, as per IFC PS 2, to the Project in the following manner:

- 1. People employed or engaged directly by SAVE project to work specifically in relation to the project;
- 2. People employed or engaged by consultants and contractors to perform work related to the core function of the project, regardless of location;
- 3. People employed or engaged by the primary suppliers under this project.

This LMP identifies a number of risks, such as:

- Occupational Safety and Health risks during construction and operation;
- Risk of communicable diseases, including Malaria and Cholera, to the workforce, students, and staff
- Noncompliance with labour laws and regulations by the contractors;
- An influx of migrant workers;
- Gender Based Violence GBV (Sexual Harassment, Sexual Exploitation and Abuse, Rape and Discrimination)
- Violence against Children; (Child labour, Defilement, Child Marriage)
- Risk of contracting HIV and AIDS and STIs;
- Risk of Contracting COVID-19
- Risk of exposure to hazardous materials and wastes
- Risk of excess exposure to noise and vibrations
- Increased competition over resources due to the influx of labour
- Discrimination and exclusion of vulnerable groups;
- Labour conflicts and work conditions

Annex 10: Health and Safety Management Plan

The Contractor shall protect the health and safety of workers by providing the necessary and approved protective clothing and by instituting procedures and practices that protect the workers from dangerous operations. The contractor shall be guided by and shall adhere to the relevant national Labor Regulations for the protection of workers. Management of different key health and safety hazards relevant to the construction activities are presented below.

- Prepare a Traffic Management Plan to ensure safety of workers, road users and community members:
- Install enclosures and cover on material storage piles, and increase moisture content;
- Implement dust suppression techniques, such as applying water or non-toxic chemicals along RoW to reduce dust from moving vehicles;
- Avoid burning solid waste;
- Remove materials from the bottom of piles to minimize dust re-suspension;
- Cover transport vehicles.
- Hazardous materials storage and handling facilities should be constructed away from traffic zones and should include protective mechanisms (e.g., reinforced posts, concrete barriers, etc.) to protect storage areas from vehicle accidents.
- Covered and ventilated temporary storage areas should be designed to facilitate collection of potentially hazardous leaks and spills, including the use of sloped surfaces to direct spill flows, and the use of catch basins with valve systems to allow spills and releases to enter a dead-end sump from which spilled materials can be pumped/recovered.
- Where hydraulic equipment is used over or adjacent to water or other sensitive receptors, biodegradable hydraulic oils should be used.
- Include secondary containment for above ground liquid storage tanks and tanker truck loading and unloading areas.
- Fuelling areas should be equipped with containment basins in areas with a high risk of accidental releases of oil or hazardous materials (e.g., fuelling or fuel transfer locations). Fuel dispensing equipment should be equipped with "breakaway" hose connections that provide emergency shutdown of flow should the fuelling connection be broken by movement. Fuelling equipment should be inspected prior to fueling activities to ensure all components are in satisfactory condition.
- Prepare a spill prevention, control, and countermeasure plan;
- Provide portable spill containment and cleanup equipment on site and provide training on how to use equipment.
- Train workers in lifting and material handling techniques, including the placement of
- weight limits above which mechanical assists or two-person lifts are necessary;
- Plan work site layout to reduce the need for manual transfer of heavy loads;
- Select tools and design work stations that reduce force requirements and holding times, and which promote improved posture, including, where applicable, user adjustable work stations;
- Implement administrative controls into work processes, such as job rotations, rest, or stretch breaks;
- Implement good housekeeping practices, such as sorting and placing loose construction materials or demolition debris in established areas away from foot paths;

- Clean up excessive waste debris and liquid spills regularly;
- Locate electrical cords and ropes in common areas and marked corridors;
- Use slip retardant footwear.
- Conduct sawing, cutting, grinding, sanding, chipping or chiseling with proper guards and anchoring as applicable;
- Maintain clear traffic ways to avoid driving of heavy equipment over loose materials;
- Wear appropriate PPE, such as safety glasses with side shields, face shields, hard hats, and safety shoes.
- Plan and segregate the location of vehicle traffic, machine operation, and walking areas, and control vehicle traffic through the use of one-way traffic routes, establishment of speed limits, and on-site trained flag-people wearing high-visibility vests or outer clothing coverings to direct traffic;
- Ensure the visibility of personnel through the use of high visibility vests when working in or walking through heavy equipment operating areas, and training workers to verify eye contact with equipment operators before approaching the operating vehicle;
- Ensure moving equipment is outfitted with audible back-up alarms;
- Use inspected and well-maintained lifting devices that are appropriate for the load, such as cranes, and securing loads when lifting them to higher job-site elevations;
- Minimize the risk of free fall of materials by installing telescoping arm loaders and conveyors; inspect all slings before use;
- Equip lifting appliances with means of emergency escape from the driver's cabin and a safe means for the removal of an injured or ill driver.
- Control site-specific factors which may contribute to excavation slope instability including, for example, the use of excavation dewatering, side-wall support, and slope gradient adjustments that eliminate or minimize the risk of collapse, entrapment, or drowning;
- Provide safe means of access and egress from excavations, such as graded slopes, graded access routes, or stairs and ladders;
- Avoid the operation of combustion equipment for prolonged periods inside excavation areas where other workers are required to enter unless the area is actively ventilated.

Annex 11: Emergency Preparedness and Response Plan Guidelines

Appropriate resources must be provided to respond to accidental and emergency situations for operations and activities during construction phase. The contractor will produce the EPRP for addressing training, resources, responsibilities, communication, and all other aspects required to effectively respond to emergencies associated with their respective hazards.

This Emergency Preparedness and Response Plan (EPRP) is intended as a practical working document for the Project. The purpose of this document is to provide the basic guidelines on how to respond to potential emergency situations that may arise from the Project. These potential emergency situations include medical emergencies and fires. All activities associated with the Project will require a site-specific EPRP to mitigate impacts, which meet or exceed all applicable regulations.

The objectives of the EPRP are as follows:

- Protect the communities and the environment through the development of emergency response strategies and capabilities.
- Set out the framework for hazard identification to define procedures for response to the situations including the development of contingency measures.
- Structure a process for rapid and efficient response to and manage emergency situations during the Construction works.
- Assign responsibilities for responding to emergency situations.

Undertake the Risk Assessment

Regular risk assessments should be conducted to identify potential hazards related to the construction works. Update the risk assessment periodically and whenever there are significant changes to the project.

A11.1 Spill Prevention and Management Plan

Liquid waste spills that are not appropriately managed have the potential to harm the environment. By taking certain actions, the likelihood of spills can be reduced, and their effect minimized. To avoid spills and to help the clean-up process of any spills, the construction contractors, supervising engineer, and the management and staff of SAVE project should be aware of spill procedures. By formalizing these procedures in writing, staff members can refer to them when required thus avoiding undertaking incorrect spill procedures.

A detailed spill management plan will be prepared for the construction phase. These plans will contain the following:

- Identification of potential sources of spill and the characterization of spill material and associated hazards.
- Risk assessment (likely magnitude and consequences)
- Steps to be undertaken taken when a spill occurs (stop, contain, report, clean up and
- record).
- A map showing the locations of spill kits or other cleaning equipment. This should also be included in the C-ESMP.

A11.2 Other Emergencies

Response plans for other emergencies, including but not limited to the following, will also be developed:

- Extreme weather events such as extreme heat, heavy downpour and consequent flooding.
- Vehicle accident.
- Electrical and fire hazards.
- Power outages and equipment Failure.
- Community unrest and worker protests

A11.3 Roles and Responsibilities

With respect to this ERP, the construction contractor has the responsibility to:

- Provide emergency response services and to structure and coordinate emergency response procedures for the Project;
- Ensure that specific emergency responsibilities allocated to them are organised and undertaken; and
- Ensure that employees and contractor third parties are trained and aware of all required emergency procedures.

Roles, responsibility and authority will be defined, documented and communicated in order to facilitate effective emergency response through implementation of the EPRP. Management will provide resources essential to the implementation and control of the EPRP including: human resources, technology, and financial resources.

The construction contractor will appoint specific emergency response representative(s) who, irrespective of other responsibilities, will have defined roles, responsibility, and authority for emergency response of the facility. The sections below provide more specific responsibilities related to each position.

A11.3.1 Emergency Response Representatives

- Actively participate in the facilities planning, implementation and reviewing of the sites ERP.
- Ensure all staff members are aware of the procedures outlined in the ERP.
- Setting up practical training schedules (drills) annually to ensure that all staff are prepared in case of an emergency.
- Report any incidents that occur to senior management staff and/or the relevant authorities.
- Appoint an Emergency Response team which includes an appropriate first aid representative and a fire warden.
- Ensure that the appointed Emergency Response team members undergo the correct training.
- Appoint an appropriate Emergency coordinator.

A11.3.2 First Aid Representatives

• Ensure that the first aid box is properly stocked to meet all foreseeable incidents which may occur.

- Ensure that the boxes are properly safe guarded and that First Aiders name appears on the box.
- Should any activity involve hazardous chemical substances, or any other specific first aid emergencies, this must be brought to the attention of the emergency coordinator.
- Ensure the first aid certificate is current.
- Ensure that there is always a first aider available at each shift.

A11.3.3 Fire Wardens

- Ensure that the firefighting equipment is regularly serviced.
- Attend the relevant firefighting training.
- Report any unserviceable or damaged fire- fighting equipment to the Emergency Response Representatives.

A11.3.4 Emergency Co-Ordinator

- Ensure that an update of the EPRP is kept on file and is easily accessible in case of an emergency.
- Ensure that all staff have been issued with the correct PPE.
- Ensure that a list of emergency telephone numbers, including those of the Emergency Response team, are visible to all staff at several locations around the facility.
- In the case of an emergency, the emergency coordinator is responsible for undertaking roll call at the designated Assembly points.

A11.4 Emergency Communications and Coordination Plan

In an emergency where there is an immediate threat to communities, personnel or the environment, the Project Manager will be notified immediately. The Project Manager will dispatch the Emergency Response Coordinator who will determine the appropriate plan of action depending on the severity of the emergency, the people affected, and the need to evacuate.

If there is a developing emergency or an unusual situation, where an emergency is not imminent, but could occur if no action is taken, the Senior Operations Manager (or if the Senior Operations Manager is absent) the Environmental Manager) is to be informed immediately. Once the emergency or unusual situation has been managed, the correct incident/near miss must be reported to the AfDB.

If an emergency poses a direct threat to communities in the area, the Environmental Officer and/or Social Officer will advise persons in the vicinity of the emergency to evacuate due to the potential risk. The appropriate government authorities will immediately be notified of such an emergency evacuation. The Emergency Response Coordinator will be tasked with responding to the potential risk. Should the emergency be such that it can be managed by ESA, equipment and personnel will be deployed to the maximum extent necessary, so as to prevent/minimise potential risks.

A11.5 Response to Incidents

An incident is any occurrence that has caused, or has the potential to cause, a negative impact on people, the environment or property (or a combination thereof). It also includes any significant departure from standard operating procedures. The reporting and investigation of all potential

and actual incidents that could have a detrimental impact on human health, the natural environment or property is required so that remedial and preventive steps must be taken to reduce the potential or actual impacts because of all such incidents.

Any incident must immediately be reported to the relevant authorities and all the necessary documentation must be completed and submitted to the relevant authorities within the prescribed timeframes.

A11.6 Verification

An environmental emergency response system will be developed for the execution of emergency drills that will include the following, inter alia:

- Fire Drills.
- Emergency Evacuation Drills.
- Medical and Environmental Drills.

Reporting and monitoring requirements for the plan will include:

- Monthly inspections and audits;
- Quarterly reporting of accidents/ incidents;
- Reporting at the time of the incident and monthly spill reporting;
- Bi-annual emergency response drills; and
- Annual reporting on training.

Appendix 12: Waste Management Plan

1. INTRODUCTION

The Waste Management Plan (WMP) addresses management of all solid and wastewater, including hazardous and non-hazardous waste, produced as a result of project activities within the College's Campus. The WMP covers the construction and operational phases. This plan constitutes the draft which will require amendment and updating during construction and operation phases of the Project.

2. PURPOSE

The WMP aims to provide guidelines on waste reduction, segregation, collection and disposal practices in accordance with international best practices, to avoid deterioration of the natural environment and negative impacts on the health and safety of communities in the Project Area.

The Project is committed to apply the waste hierarchy and will seek to be a zero-waste discharge facility. This plan is the primary tool to guide employees towards waste management.

3. WASTE MANAGEMENT OPTIONS - WASTE HIERARCHY

The waste hierarchy presents waste management stages commencing with the most preferable option to the least preferable option. Waste prevention is the most preferred option of prevention, followed by reuse, recycling, recovery and is safe disposal as the last option (Figure 1).

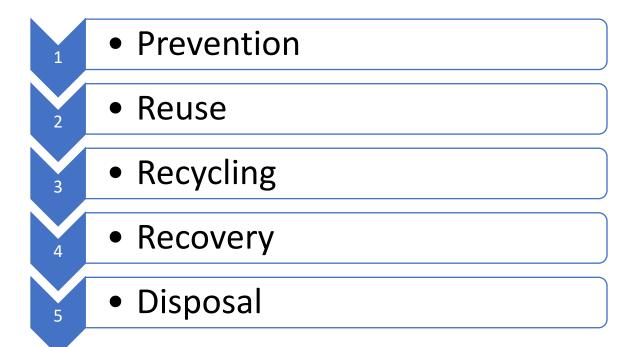


Figure 1: Waste Management Hierarchy

These stages are described in more detail below:

A. Prevention

Waste Generators should ensure there is minimal wastage. This could be achieved through reduction of construction mistakes, ordering the right quantities of materials, getting the right-size materials for the job, proper storage of materials, trying out new building methods and choosing building products with minimal packaging. Waste Generators should be committed to avoiding the generation of waste and not using hazardous materials. Where the use of hazardous materials is unavoidable, efforts should be made to identify replacement materials that are non-hazardous.

B. Re-use

Waste Generators should be required to prepare a maintenance management plan which seeks to ensure that all equipment is regularly checked and maintained and refurbished or repaired. In addition, Waste Generators should seek to sell and buy used items, donating them for free or exchanging them.

C. Recycling

Waste Generators should seek to turn waste into a new substance or product, such as composting of organic wastes to a standard that meets quality controls. This compost could be sold or given to farming communities around the construction and operations sites to facilitate improvements in soil conditions and hence their production levels.

D. Recovery

Recovery of waste is usually most successful when done in bulk. Therefore, a centralised recovery facility is preferable. The common forms of recovery include composting, anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste. It is recommended that composting should be considered for organic solid waste and sludge that will be generated at the Technical College.

E. Disposal

Disposal is deemed the last resort and must occur in an environmentally responsible manner. Disposal results in waste going to landfill or to incineration without energy recovery and is the least preferred environmental option. However, when wastes must go for disposal, this must occur at a suitably designed sanitary waste disposal site.

4. WASTE CATEGORIES GENERATED IN THE PROJECT

Solid waste generation in the at the Technical College during project life cycle will generally include domestic waste, commercial waste, e-wastes, construction and demolition debris, sanitation residue and waste water. These wastes will be in solid or semi-solid form and will potentially include very low quantities of industrial hazardous wastes and bio-medical waste. All industrial hazardous waste and biomedical waste must be disposed of properly by the respective industries and cannot be included in the general waste management system. The main waste categories anticipated are:

✓ Biodegradable waste (food and kitchen waste, green waste such as vegetables, leaves and fruits; and sludge)

- ✓ Recyclable material (paper, glass, bottles, cans, metals, certain plastics, etc.); and
- ✓ Inert waste (construction and demolition waste, dirt, rocks, street sweeping, drain silt, debris, etc.)

The sources of waste and waste generators and the anticipated content of the solid waste generated are presented in table 1 below.

Table 1: Sources of waste, waste generators and content

Source	Typical waste generators	Solid waste content
Domestic	Dwelling units	Food wastes, paper, cardboard, plastics, textiles,
		leather, yard wastes, wood, glass, metals,
		consumer electronics, batteries, limited
		household hazardous wastes and sewage waste.
Commercial	Stores, lecture rooms,	Paper, cardboard, plastics, wood, food wastes,
and	cafeteria, market, office	glass, metals, special wastes, hazardous wastes
Institutional	buildings	
Construction	New construction sites,	Wood, steel, concrete, rubble, dirt etc.
and	renovation sites, demolition	
demolition	of building structures	
Wastewater	Water and waste water	Drain silt, landscape and tree trimmings, general
	treatment plants	wastes and sludge.

5. WASTE TREATMENT OPTIONS

The primary options for the treatment of solid waste include, in order of environmental benefit:

- ✓ Anaerobic Digestion;
- ✓ Composting (windrow, aerated static pile, in-vessel and vermin-composting);
- ✓ Incineration with or without energy recovery;
- ✓ Pyrolysis and gasification;
- ✓ Plasma pyrolysis and palletisation; and
- ✓ Reuse Derived Fuel (RDF) for mixture waste.

Since the nature of waste envisaged is mainly organic, bioconversion methodologies are considered the preferred technology.

6. EXISTING AND PROPOSED WASTE MANAGEMENT INFRASTRUCTURE IN AT SOCHE

There are organized waste management systems such as collection, transport and disposal. The Technical College has both solid and wastewater collection and disposal facilities. Solid waste disposed is stored in Waste Collection Bin that are placed in strategic places at the campus and then legally dumped at Medi Dumpsite.

7. SOLID WASTE MANAGEMENT IN THE PROJECT AREAS

All Waste Generators within Project Areas will be required to segregate waste at source to ensure the value of the wastes are optimised through recovery, reuse and recycling. By providing an enabling environment the success rate of correct waste practices being implemented are increased. Segregation should be by generators and into three main waste streams:

- ✓ Wet (biodegradable);
- ✓ Dry (plastic, paper, metal and wood); and
- ✓ Domestic hazardous wastes (diapers, napkins, empty containers of cleaning agents, mosquito repellents etc.).

Collection of the segregated waste is to be undertaken by an authorised waste collector. As a minimum wet and dry wastes should be segregated (2-bin system) by the waste generators

Construction and demolition waste should be stored separately. Opportunities to repurpose this waste as secondary aggregate to the construction industry should be investigated to ensure this waste is either utilised in the Project Sites or is sold as a product to the construction industry. No construction or demolition waste should be disposed of to landfill. No hazardous wastes shall be permitted to be disposed of outside the boundary of the Project Sites unless being transported to a sanitary landfill. It will be the generators responsibility to ensure that the waste collector which will be transporting the waste for disposal is licenced to do so. In addition, the Generator will need to provide evidence in writing from the receiving disposal site of its capacity to recycle or dispose of the waste in an environmentally sound manner. Proof of safe disposal should be provided to the Blantyre City Council, such as a waste disposal ticket issued and date stamped by the landfill.

During the operation phase, this waste will be taken directly to the treatment sites. Primary collection of solid waste will occur using segregated bins or containers which will be placed on the streets for collection. This waste will be taken to a solid waste intermediate storage facility. The use of an intermediate site allows for the optimisation of transport devices and manpower which in addition allows for timely collection of waste from source and onward treatment. Secondary transportation occurs from the storage area to the landfill site. The dry waste such as paper and plastic and cardboard and glass are to be recycled. Waste collection from generators within the college campus will need to occur on a daily basis in order to prevent garbage containers overflowing and waste littering the streets. To maintain a hygienic environment regular waste clearance is required.

8. PERFORMANCE MONITORING

Site inspections must be performed on regular basis by qualified personnel from the College Inspections will ensure that all commitments in this Waste Management Plans are being enforced and that specific waste management elements are verified.

8.1. Data Collection

Implementation of the waste hierarchy principles requires that destinations and quantities of residual matter are monitored. A register of waste material should be maintained to ensure the measurement of eliminated waste and of residual matter sent for reuse, recycling and reclamation.

8.2. Waste Audit

After a year of operation, a waste audit should be performed, on all waste data collected, to identify waste streams and fate and develop ways to reduce waste production.

9. PERFORMANCE INDICATORS

Measurement is an important tool in improving performance, and performance indicators will help the Technical College define and measure progress towards its goals. The results reflect current conditions and allow orientation and coordination of further actions towards sustainability.

9.1. Environmental Audit Results

Environmental auditing is a key process in the implementation of the Environmental and Social Management Plan (ESMP), of which the WMP forms a part. The findings of each audit should be registered in a database, where corrective and/or preventive actions are prescribed, responsibilities assigned to people, deadlines established and necessary resources mobilised. In compliance with the procedure, audit reports should categorise findings as being either "major", "minor" or "observation". The number of findings shall be decreasing every year until the ultimate goal of zero major findings is achieved.

9.2. Percentage Waste Generated

During the operational phase, the quantities and types of waste produced should be tracked for each waste generators categories, and activities examined to identify waste reduction opportunities. Specific reduction target ratios should be determined and the rate of waste production is required to reduce annually relative to production volumes.

10. RESPONSIBILITIES

The roles and responsibilities inherent to the Waste Management Plan are presented in Table 2.

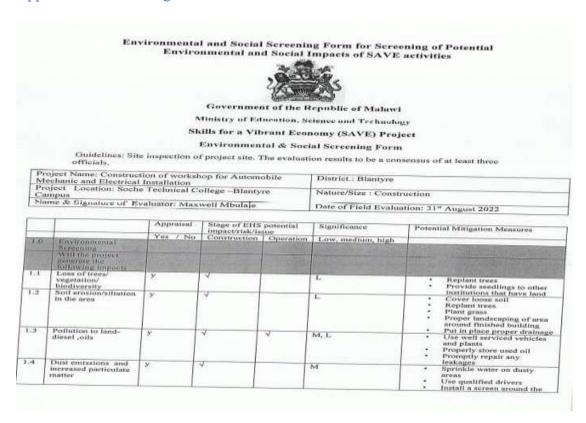
Table 2: Roles and Responsibilities

	Responsibilities
Entity	
Soche	- Enforce the Waste Management Plan.
Technical	- Contractually obligate the Waste Generators to meet the requirements of the
College	Waste Management Plan.
	- Manage the Solid Waste Management Area or appoint an appropriate
	contractor.
	- Manage the Solid Waste Treatment plant or appoint an appropriate contractor.
	- Manage the Wastewater Treatment plant or appoint an appropriate contractor.
Contractors	- Provide a minimum of two garbage receptacles to allow for wet and dry waste
	segregation. An additional bin for hazardous waste is highly recommended.
	- Develop a site-specific Waste Management Plan for the activities the
	Contractor is undertaking.
	- Site-specific Waste Management Plan must be aligned with the full site waste
	management plan and must be approved by the Technical College prior to work
	commencing.
	- Educate all members of staff on the waste hierarchy.
	- Educate all members of staff on site-specific Waste Management Plan -
	Education is to be provided to each staff member prior to commencement of
	work, and regular refresher sessions are to be undertaken in the form of toolbox
	talks or training sessions throughout the contract period.

11. RECORD KEEPING

Data on waste production and disposal should be gathered continually via logbooks and registers. Records should be maintained on site and made available to the authorities and any other party contracted to audit or assess the waste management practices on site. The data should include the final destination of each waste stream and where disposal has occurred proof of safe disposal will be required, such as a date stamped waste disposal ticket issued by a sanitary landfill. A cost should be paid for safe disposal of wastes. Evidence of waste disposal should also be maintained.

Appendix 13: Screening Form



1.5	Solid waste					project area Vehicles carrying dust generating raw materials should be well covered to avoid dust emission Enforce speed limit (20km/hr) Provide PPE to workers Sensitise staff and students on project activity Establish Grievance Redres Management Committee for staff and attdents
1.6	generation	У			M, L	Provide waste receptacles Lialse with Blantyre City Council for waste disposal services Contractor to construct toilets for construct
1.7	Liquid wastes and waste water generation	y			M,M	Connect building to existing City sewer line Sensitise users on proper use Provide proper drainage for storm water
	hazardous chemicals and wastes	y			М	Provide PPE to workers Liaise with Blantyre City Council on proper disposal of hazardous waste Store hazardous materials in secure and access restricted places Provide adequate signage Contractor to employ
1.8	Borrow pits and pools of stagnant water	У	1		М	qualified OSHO Source materials from licensed suppliers
.9	Rubble/heaps of excavated soils	У	N		М	Use for landscaping
.10	Invasive tree species	У	4	1	L, L	Disposal at designated sites Liaise with forestry department when planting trees Plant local indigenous
	Long term depletion of water	z				Varieties
	Reduced flow of water sources	N				
13 1	Nuisance from noise and vibrations	У	7		М	Use well serviced vehicles and plants Enforce speed limit (20km/hr.) Use certified drivers

1.14						Restrict working hours during the day (Gam to opn Avoid turner-every hooting Switch off engines when ne in use Limit time for workers everyed to notise and vibrations Batablish GRMC for staff and students to handle noise complaints
1	flooding	N	71			- AND
1.10	Increased Energy	У	14	17	M ₄ M	
1.17	(2000)	, v	-			Design considerations to reduce energy use Install a mix of energy sources (solar, hydro)
1.18	and/or portable wate				M, L	Develop proper arrangemen on portable water source use Install water storage system Install separate water meter.
	of man-made and natural disasters c.g. fires etc.	У	3	7	M, L	For contractor Install fire detection and suppression systems Sensitize staffstudents on fire safety Designate emergency assembly points Put proper signage for directions in case of emergency Install fire hose reals and produce of the safety of the safe
2	Cultural, Social and Economic Servening	1000000	1000		THE RESERVE OF THE PERSON NAMED IN	одириен
Andi	Will the project enerate the ollowing negative octal and economic maneta?					
1 16	oss of land to ouseholds	n		1		
L	oss of properties -	n				
L		n				
Li	THE RESERVE TO SERVE THE PARTY OF THE PARTY	,				
Le	oss of access to					
riv	er/forests/grazing					

	eren					
2.	6 Impact cultural site, graveyard land	Y		4	To the	Follow CHANCE find Procedure
28.7	Conflicts over use o	ry	1 .		- 1	
	local water resource	4			L	Develop proper arrangement on portable water source use
2.8		- 11				The state of the s
	important pathwaya,			-		
2.9	Less communal facilities -churches	n				
2.1	0 Loss of livelihood	l n		_		
2.11	Blockages to	1000				
500	footpath/roads					
ET3	Bring resultiement	n.				
.13		У	14		M	Contractor to have a
14	Spread of Covid-19					workplace policy on HIV and AIDS and STIa Senaitiae workers, students and staff on HIV and AID and STIa Distribute HIV and AIDs experience of the prevention and control provention and students and staff students and staff
	Occupational safety	73			L. L.	Sensitise workers and communities on Covid 19 Adhers to Covid 19 prevention protocols
1	and health issues	5'	14		M	• Install proper stanger to
	ncrease exposure of					strategic places Store hazardous materials is secure and restricted necess area. The secure area restricted necess area. Provide first Aid kits and train users Develop and use work place safety code of conduct Contractor to employ qualified OSHO certificate to have OSH certificate to have OSH
1 1	ncrease esposure of faracticular chemicals and wastes		7		Nd.	Install proper signage in strategic places I-loard the construction site Store hazardous materials in secure and restricted several strategic places Froylide indequate and

2.17						appropriate PPE Provide first Aid kits and train users Develop and use work place safety code of conduct Contractor to employ qualified OSHO Develop Grievance Redress Management Committee to handle complaints
2.18	Safety issues with respect to poor building designs Exclude other users	У		7	M, L	Use qualified architects in designing building. Provide for disability friendly technologies in design and construction Designs and plans should be approved by regulators (Blantyre city council)
	expecially disabled and vulnerable with respect to poor building designs	y	1		M, L	 Provide for disability friendly technologies such as tamps in design and construction
2.19	Increased GBV and SEA	У	7		м	Put in place work place code of conduct, conditions of service and Grievance Redress mechanism (GRM) Provide equal employment opportunities for both women and men Sensitise workers on code of conduct, conditions of service and GRM Put in place GBV and SEA
.20	Increased violence against children	У	4		Ľ	workplace policies • Employ only those 18 and above • Use National Identification cards for verification

Overall evaluation of Screening Exercises.

The results of the screening process would be either the proposed sub - projects would be exempted or subjected to further environmental and resettlement assessments. The basis of these options is listed in the table below:

Review of Environmental Screening	Tick	Review of Social and Economic Screening	Tick
 The project is cleared, No serious impacts. (When all scores are "No" in form)), though the bids/contracts still would have standard EHS clauses 		The project is cleared. No serious social and economic impacts, (Where scores are all "No", "few" in form) though the bids/contracts still would have standard clauses on addressing emerging social and economic issues.	- V
2. There is need for further assessment -ESMP or	4	2. There is need for resettlement/ compensation.	

ESIA (when some score are "Yes, High" in form), as determined by MEPA	(When some score are "Yes, High" in form) including need for ESMP or ESIA as determined by MEPA	
Approval by Environmental officer/ Name: Maxwell Mbulaje	Approval by Director of Planning and Development Name:	
Signature Cather Date: 31" August 2022	Signature Onte	

NOTES

- 1. The DPD shall ensure that a completed form is filed within project file immediately after endorsement. Environmental Officer may keep a duplicate.
 2. Project Management Committee will maintain a copy of completed form
 3. It is the duty of Director of Planning and Development and Environmental Officer to ensure mitigation measures outlined in form are implemented.
 4. An Environmental Officer shall prepare a monthly monitoring report on implementation of mitigation measures.
 5. The mitigation measures shall be sourced from expert knowledge, stakeholder consultations, EHS guidelines etc.
 6. The bids/contracts still would have standard EHS clauses
 7. The screening form will be updated prior to use, to reflect a more final set of EHS potential impacts/risks/issues

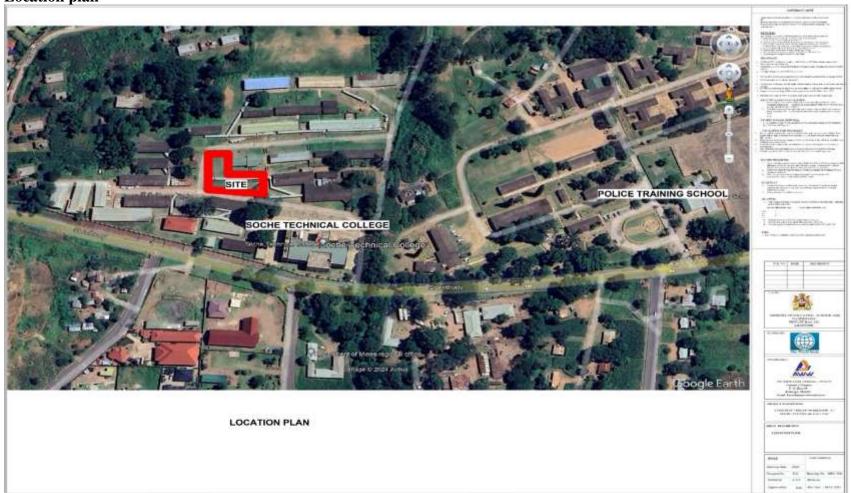
District Commissioner

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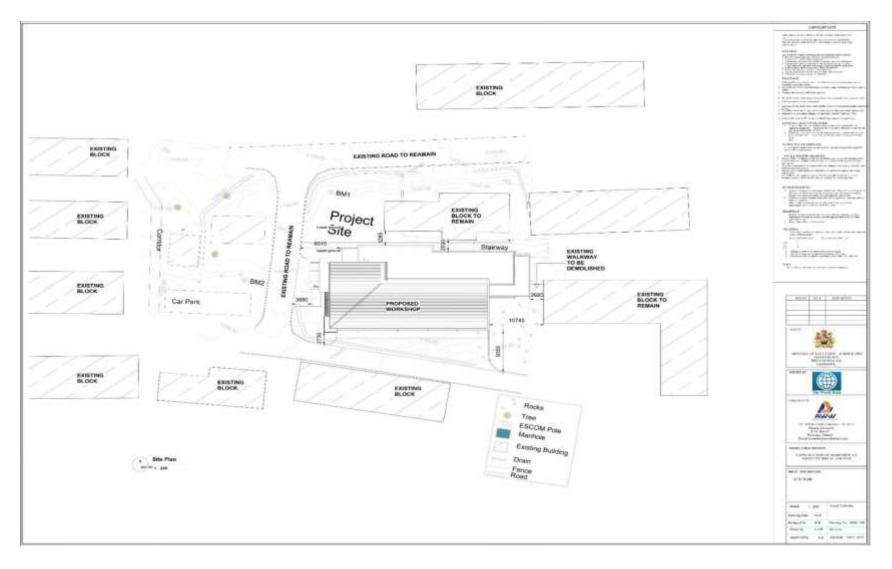
Blantyre District Council Private Bag 97, Blantyre

Appendix 14: Site Layout Plans and Designs

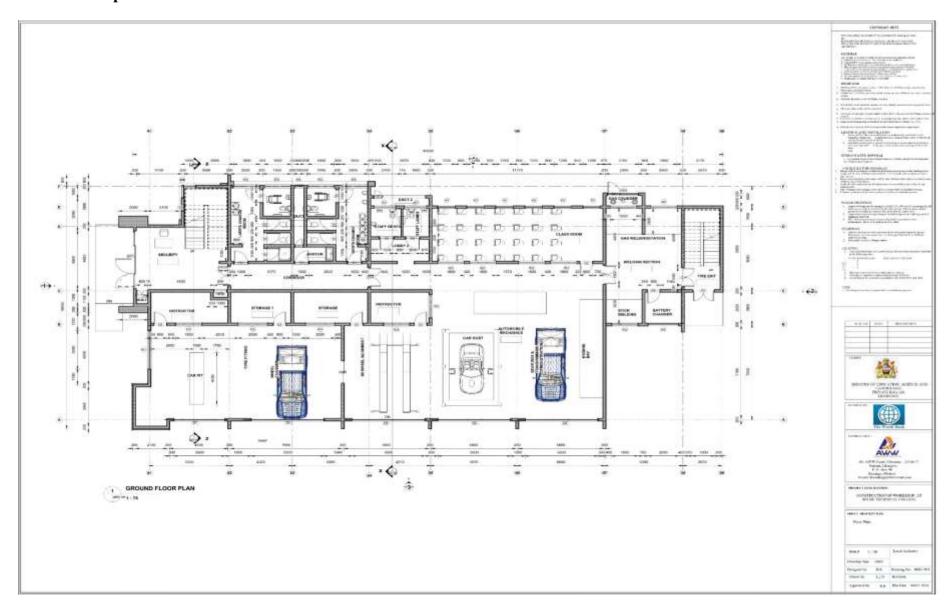
Location plan



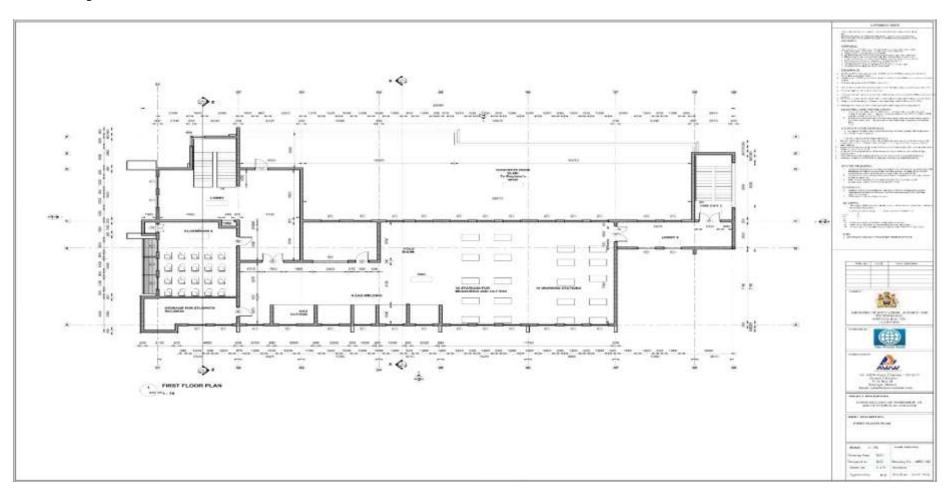
Site Plan



Ground floor plan



First floor plan



Workshop in 3D

