

Government of Ghana



Ministry of Lands and Natural Resources  
Lands Commission

## CONSTRUCTION OF A CLIENT SERVICE ACCESS UNITS IN HO UNDER THE SECOND LAND ADMINISTRATION PROJECT (LAP 2)-ADDITIONAL FINANCING

### ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT



FINAL DRAFT REPORT

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## List of Abbreviations

AF	Additional Funding
ARAP	Abbreviated Resettlement Action Plan
BP	Bank Police
CLS	Customary Land Secretariats
CSAUs	Client Service Access Units
CICOL	Civil Society Coalition on Land
dB	Decibels
EA	Environmental Assessment
EHS	Environmental, Health, and Safety
EHS-MP	Environment Health and Safety Management
EPA	Environmental Protection Agency
ESIA	Environmental Impact Assessment
ESMP	Environmental and Social Management Plan
GELIS	Ghana Enterprise Land Information System
GNFS	Ghana National Fire Service
GoG	Government of Ghana
GRC	Grievance Redress Committee
HSE	Health, Safety, and Environment
IDA	International Development Association
LAP	Land Administration Project
LUSPD	Land use and Spatial Planning Department
LI	Legislative Instrument
LRP	Land Registration Division
LVD	Land Valuation Division
mm	millimetres
MMDAs	Ministries Departments and Agencies
NEAP	National Environmental Action Plan
OHS	Occupational Health and Safety
OP	Operational Policy
PIU	Project Implementation Unit
PM <sub>10</sub>	particles are less than 10 microns (Particulate Matter)
PPE	Personal Protective Equipment
PVLMD	Public and Vested Lands Management Division
RAP	Resettlement Action Plan
SC	Supervising Consultant
SMD	Survey and Mapping Division
TSP	Total Suspended Particles

USD	United States Dollars
WHO	World Health Organisation
°C	Degrees Celsius
µg/m <sup>3</sup>	microgram per cubic meter

# Executive Summary

Under the Second Land Administration Project (LAP-2) - Additional Financing, there is a proposal to expand Client Service Access Units (CSAUs) to five (5) regions in Ghana. As part of the proposal, two new CSAUs offices are to be constructed in Cape Coast and Ho. In addition, an extension to the existing the Lands Commission Office in Sunyani is being considered to serve the same purpose. The construction of the new offices trigger World Bank safeguards operational policy on environmental assessment (OP 4.01) and as well as Ghana's Environmental Impact Assessment Regulation, 1999 (LI. 1652) as Amended. Hence, the need to prepare an Environmental and Social Impact Assessment (ESIA) to identify, assess and manage the anticipated environmental and social impacts/risks associated with the civil works such as generation of construction, liquid and solid waste. This ESIA covers the proposed CSAU in Ho.

The prime objective of this Environmental and Social Impact Assessment (ESIA) is to bring the project into compliance with applicable national environmental legal requirements and the World Bank's environmental and social policies.

## **Alternatives Considered**

The alternatives considered as part of the conception of this project are:

- i. No action scenario; and
- ii. The project implementation scenario (Construction of a new CSAU/refurbishment of existing office and type of construction materials)

The no action scenario assumes that the status quo will prevail into the foreseeable future, implying that there will be no expansion in CSAU in Ho. Although this option is associated with no environmental and social impacts, the congestion at the office will get worse as the number of transactions increase with time, thereby undermining efficient delivery of services.

The project implementation option involves the expansion of CSAU in five regions of Ghana. This implies that Ho, will have a CSAU either through a new construction or refurbishment of existing offices of the Lands Commission. This option is associated with a number of adverse environmental and social impacts/risks such as generation of construction waste and potential accidents on site during the construction phase of the project. However, it will decongest the Lands Commission and improve in service delivery efficiency. This option will also bring relief to clients who shuttle between various divisions of the Lands Commission to transact business. The adverse environmental and social impacts/risks can be mitigated through an ESIA.

Within the project implementation option, two variants were considered for evaluation. These are the provision of a standalone newly built office and the refurbishment of existing (divisional) offices in Ho. The former offers more space for the department but it is associated with additional significant impacts such as soil erosion and utilisation of more natural resources such as sand and aggregates. The option to construction a new office was selected over the refurbishment option because it provides a one stop shop for lands transactions in the selected regions and meets the space requirement for the CSAU.

In terms of the choice of building materials, sandcrete was opted for over bricks though the factory price of latter is less than the former. However, long haulage distances from the production zones to the project site makes bricks more susceptible to transportation losses and higher haulage cost. These increases the unit price of bricks, making it comparable to that of concrete blocks. In addition, bricks are not readily available on the market though it has a lower thermal conductivity compared to sandcrete.

### **Project Location**

The proposed project will be located in Ho, the capital of the Volta Region. In Ho the project site is at the intersection of the Starlets 91 Street and the Residency Road, opposite the SSNIT office. The site is 2.1 acres.

### **Project Components**

The proposed CSAU Ho is a single storey open office structure to be partitioned into cubicles and a back office room for staff to sort and batch documents received. There will be a client waiting area, an office for the head of the unit and an on-site bank as well as washrooms for clients and the officials. The office will have a floor area of about 300 square metres each.

### **Project Activities**

Specific activities to be undertaken as part of the construction phase will include, setting out, clearing, trenching, digging and casting of concrete for the building foundation (sub structures) as well as masonry and carpentry works during the erection of superstructures and roofing. Other activities in the construction phase are fixing electrical fittings, plumbing, fixing of doors, windows, counters, networking, tiling of floors, external paving and landscaping as well as finishes. The project duration is twelve (12) months.

### **Baseline Conditions**

Ho lies in the semi deciduous forest region. The rainfall pattern is characterized by two rainy seasons. The major season occurs from March to June and the minor season is from July to November. According to Ho Municipal Assembly (2014), mean monthly rainfall figures are between 20.1mm and 192mm. Noise and air quality on site was satisfactory. The major source of emissions and noise on site were moving vehicles on the Residency and Starlets 91 Road. No water bodies, natural habitats and cultural heritage site were observed in the immediate project environs There were three food vendors and two lotto operators on the Ho site, who will not be impacted by the proposed project. The population of the catchment of the proposed CSAU in Ho, which is the Volta Region, is estimated at 2,118,252

### **Consultations**

Officers of the Lands Commission, Environmental Protection Agency and Town and Country Planning Department in Ho were consulted as part of the preparation of the ESIA. Issues discussed included, project components, impacts and mitigation measures during the construction phase as well as permits. Field inspections and face-to-face meetings were the main tools used during the consultation process.

### **Environmental and Social Impacts/Risks**

The adverse environmental and social consequences during the construction phase of the CSAU in Ho are as follows:

- Soil erosion and ponding of local drains;
- Project impact on material sources;
- Intermittent increase in noise pollution;
- Accidents;
- Disruption in utility supply;
- Potential increase in illicit sexual affairs, rape, defilement, and crime by the contractors' employees; and
- Generation of construction, solid and liquid waste; and

Post construction impacts are generation of liquid and solid waste by visitors and staff of the unit. It must be emphasized that these impacts/risks will be short-lived and can be minimized or controlled when appropriate mitigation and compensation measures are undertaken. Again, the implementation of the project will come with short term employment opportunities for construction workers and vendors during the construction phase of the project.



**Environmental and Social Management Plan (ESMP)**

The ESMP is presented in the tables below shows the:

- Identified impacts;
- Actions for mitigation related to each impact;
- Responsible agencies for the implementation of the mitigation measures; and
- Responsibility for supervision.

A monitoring plan, budget estimate and sources of funding have also been included in this section. A grievance redress mechanism, emergency response procedures for optional hazards and proposals for decommissioning the works have also been prepared as part of the ESIA. Contractual clauses to be inserted into the contract/bid documents as well as a sample guideline for preparing a code of conduct for workers have also been attached in the appendices.

**Table 1: Environmental & Social Management Plan for CSAU in Ho**

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
<b>Erosion and Ponding</b>	Construction	<ul style="list-style-type: none"> <li>Site clearing will be staggered.</li> <li>Only areas required for construction will be cleared</li> <li>Material stockpiles will be bonded and covered with tarpaulin or an approved material</li> <li>Site clearing will be authorised only by the Supervising Consultant</li> </ul>	Project Site	Project Contractors	Supervising Consultant	<b>No Separate Cost</b> (Cost included in the BOQ)
<b>Impact Material Sources</b>	Construction	<ul style="list-style-type: none"> <li>Existing trees on site will be incorporated into the project design as much as possible</li> <li>Trees that are felled during construction will be replaced four fold and nurtured for six months</li> <li>No sand/burrow pit will be opened by the Contractors</li> <li>Contractors will procure materials (sand and aggregates) from Ghana EPA certified suppliers</li> <li>Cost of re-instatement of material sources is implicit in the unit cost of the various materials (sand, gravel and quarry products)</li> </ul>	Burrow pits/ Quarries	Suppliers	Contractor/ Supervising Consultant	<b>No Separate Cost</b> (Cost is covered in the unit cost materials)
<b>Air and Noise Pollution</b>	Construction	<ul style="list-style-type: none"> <li>Workers of Public and Vested Land Management Division of the Lands Commission and petty traders within the project environs will be notified at least 24 hours ahead of any excessive dust and noise generation activities</li> <li>The site will be hoarded with aluminium sheet or an approved material by the Supervising Consultant</li> <li>All equipment will be service at least once a month</li> <li>Painters and workers engaged in the treatment of wood will made to wear in nose masks, gloves overall and boots;</li> <li>Noise generation activities and delivery of supplies will be undertaken over the weekends and before 8.00 am and after 5.00pm</li> <li>Turning off equipment and vehicles when not in use</li> <li>Debagging of cement will be done in an enclosed area by workers wearing appropriate Personal Protective Equipment (PPE) such as hard hats, reflector jackets,</li> </ul>	Project Site/Immediate Project Environs /Along Haulage routes	Project Contractors	Supervising Consultant	<b>No Separate Cost</b> (Cost included in the BOQ)

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
		<p>overalls and others such as nose masks, hand gloves and ear plugs.</p> <ul style="list-style-type: none"> <li>Limiting speeds for haulage and delivery trucks as well as equipment on haulage routes roads to less than 20km/h</li> <li>Exposed surfaces will be watered at least twice a day</li> <li>Concrete mixers will be fitted with mufflers;</li> <li>Cover haulage trucks with tarpaulin</li> </ul> <p>Construction equipments will be shut down when not in use</p>				
<b>Generation of Waste</b>	Construction	<ul style="list-style-type: none"> <li>Off cuts from pipes and electrical fittings as well as broken tiles will be reused for other civil works elsewhere;</li> <li>Wood residue, cement blocks and other waste will be used as fill material;</li> <li>Waste that cannot be reused will be transported to the approved landfill site;</li> <li>Empty paint and solvent containers will be collected and kept in a well ventilated store room with a paved floor and returned to suppliers to be re-used;</li> <li>Two mobile toilets and three refuse bins will be provided on site;</li> <li>Mobile toilets will be dislodged after close of work every day</li> <li>Refuse will be collected by a private refuse collection company three times a week</li> </ul>	Project Site	Project Contractors	Supervising Consultant	<b>No Separate Cost</b> (Cost included in the BOQ)
	Operational	<ul style="list-style-type: none"> <li>Three (3) refuse bins will be provided on the premises,</li> <li>Refuse bins will be emptied three times a week by the private waste collectors</li> <li>Liquid waste will be channelled into septic tanks to be constructed as part of the CSAU.</li> <li>Septic tanks will be dislodged once a year.</li> </ul>	At the premises of the new CSAU	Regional Officers	Lands Commission	<b>USD 120.00</b> (Cost covers USD 120.00 the supply of 3 refuse bins @ USD 40.00 per bin)
<b>Accidents/ Occupational Health and Safety Risks</b>	Construction	<ul style="list-style-type: none"> <li>The site will be hoarded to prevent unauthorised persons from accessing the work areas;</li> <li>Hoarding of the site should be undertaken using aluminium or an approved material by the Supervising Consultant;</li> <li>Trenches will be covered immediately they are not required;</li> <li>All trenches will be barricaded with caution tape;</li> <li>Water collected in trenches will be pumped daily after work;</li> </ul>	Project Site	Project Contractors	Supervising Consultant	<b>USD 2,000.00</b> (Cost covers the organisation of two occupational health and

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
		<ul style="list-style-type: none"> <li>■ Equipments and vehicles will be turned off when not in use</li> <li>■ Cement should be debagged in an enclosed area by workers wearing nose masks, overall and boots;</li> <li>■ Scaffolds will be used for activities above 2 metres</li> <li>■ Scaffolds will be on solid footings not on boxes, loose bricks and stones, etc.;</li> <li>■ Scaffolds will have guardrails, midrails and toe boards;</li> <li>■ Scaffolds will be mounted be at least 3 m away from any electric power line.</li> <li>■ Scaffolding will be inspected each time it is mounted by a competent site engineer (Supervising Consultant)</li> <li>■ Two mobile toilets and three refuse bins will be provided on site for site workers;</li> <li>■ Prohibitive, warning and directional signs will be provided on site;</li> <li>■ All workers will undergo medical screening before they are employed on site;</li> <li>■ Only healthy workers will be employed on site;</li> <li>■ Potable water will be provided for site workers;</li> <li>■ At least two (2) fire extinguishers, three (3) First Aid Kit will be provided on site and made accessible to site workers to use in case of emergency;</li> <li>■ All workers will be given contracts specifying the type of work they are to undertake and their remuneration package as well as the conditions of service in line with the Labour Act, 2003;</li> <li>■ Personal Protective Equipment (PPE), namely, hard hats, reflector jackets, overalls and boots will be provided for all workers on site and others such as nose masks, hand gloves and ear plugs will be provided for workers whose tasks require these PPEs;</li> <li>■ The use of PPEs will be enforced by the Contractor</li> <li>■ Clear sanctions and rewards for non-compliance and compliance respectively will captured in the Code of Conduct to be signed by the contractor and their employees;</li> <li>■ A Health and Safety Officer will be employed to oversee the health and safety aspects of the works, hold daily briefing sessions (tool box meetings) with site workers prior to</li> </ul>				<p><i>safety training programme for each of the Contractor)</i></p>

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
<b>Public and Risks</b>	<b>Health Safety</b>	<ul style="list-style-type: none"> <li>commence of work and enforce a No PPE–No site entry policy;</li> <li>■ The contact numbers of the nearest health facility, fire station and police station will be pasted at a visible point on site; and</li> <li>■ Conduct one training programme in occupational health and safety for the employees of the contractors</li> </ul>	Project Site	Project Contractors	Supervising Consultant	<b>No Separate Cost</b>
		<ul style="list-style-type: none"> <li>■ Delivery trucks and construction vehicles will drive below the 20km/hr speed limit;</li> <li>■ Schedule delivery of materials to before working hours (9.00am to 5.00pm) on weekdays or deliver over the weekend;</li> <li>■ The site will be hoarded to prevent unauthorised persons from accessing the working zone;</li> <li>■ Visitors on the site will provided/required to wear with safety gear e.g. reflector vests, hard boots and helmets</li> <li>■ Provide warning, mandatory, prohibitive and directional signs to guide site workers and visitors who will access the project buildings during the construction phase</li> <li>■ The contractor will paste the company’s contact boldly on all vehicles and equipment</li> </ul>				
<b>HIV/AIDS, STI and Sexual Affairs</b>	Construction	<ul style="list-style-type: none"> <li>■ The contractors’ employees will be sensitised on the dangers associated with illicit sexual affairs two (2) times during the project duration e.g. risk of catching STDs and criminality</li> <li>■ Two HIV/AIDS/STI Awareness training will be provided for employees of the contractor prior to the commencement</li> <li>■ 200 condoms will be distributed among contractor’s employees every month</li> <li>■ A Code of Conduct will be prepared for contractor’s employees to inform them the sanctions for rape, defilement and other illicit sexual affairs (see Appendix F sample guideline for preparing a Code of Conduct)</li> <li>■ Contractual clauses against rape, defilement and other illicit affairs as well as child and forced labour and discrimination by sex, ethnicity, etc. will be inserted in the Contractor’s Contract document</li> </ul>	Project Site	Project Contractors	PIU	<b>USD 2,600.00</b> <i>(Cost includes USD 600.00 for procuring 200 condoms for twelve months @ USD 0.5 per condom, and USD 2,000.00 for two HIV/AIDS and STI awareness programmes for workers @ USD 1,000.00 per training session)</i>

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
<b>Increase Crime and Conflict</b>	Construction	<ul style="list-style-type: none"> <li>Regional Lands Officer and Grievance Redress Committee will resolve localised conflicts</li> <li>Crimes such as theft, rape and defilement will be reported to the nearest police station directly or through the grievance redress committee</li> <li>Employees who engage in criminal activities will be summarily dismissed and handed over to the police</li> </ul>	Project Site	Supervising Consultant	PIU	<i>No Separate Cost (There is a project GRM already in place)</i>
<b>Disruptions in the Supply of Utility</b>	Construction	<ul style="list-style-type: none"> <li>Organisations in the project zone will be given at least 24 hours' notice before any power outage/cut in water supply is occasioned on account of the project</li> </ul>	Project Zone	Supervising Consultant	Regional Lands Officer	<b>No Separate Cost</b>

### **Institutional Arrangements for Implementing the ESMP**

The Lands Commission is solely responsible for the implementation of ESMP during the construction phase. The Commission has a PIU which is implementing the Land Administration Project. Since the PIU is not staffed with environmental and social safeguards specialists, it intends to procure the services of a short-term individual environmental and social safeguards specialist to support the implementation and monitoring of the ESMP on its behalf.

In addition, there will be a supervising consultant (engineer or architect) on site charged with the day-to-day supervision of the works, enforcing environmental and social contractual clauses and ensuring that recommendations from the environmental and social safeguards specialist are implemented within specified timelines.

During the post construction phase of the project, the Lands Commission will be responsible for the management of the office. The Regional Lands Officer will manage the new office.

### **Environmental and Social Monitoring Plan**

Although the PIU will be solely responsible for the monitoring of the ESMP, other institutions namely EPA, Ministry of Lands and Natural Resources, the Lands Commission, the World Bank and the various assemblies may undertake ad hoc monitoring of the environmental and social performance of the project.

Since the PIU of the Lands Commission does not have an in-house environmental and social safeguards specialist, it intends to procure a short-term environmental and social safeguards specialist to undertake monthly monitoring of the civil works during the construction phase. The cost associated with employing an independent consultant to undertake monthly monitoring over the duration of the duration of the project is summarised in Table 2, while the monitoring roles are presented in Table 3.

**Table 2: Cost of Monthly Monitoring Visit to the Ho Site During the Construction Phase**

Item	Days per Trip	*Number of Monitoring Trips during the Construction Phase	Unit Cost	Total Cost
<b>Fees</b>	3	12	300.00	10,800.00
<b>Vehicle Rental</b>	2	12	150.00	3,600.00
<b>Fuel</b>	1	12	100.00	1,200.00
<b>Per diem</b>	1	12	150.00	1,800.00
<b>Total</b>	-	-	-	<b>17,400.00</b>

*\*12 monitoring visits are anticipated over the 12-month project implementation duration*

**Table 3: Environmental & Social Monitoring Plan**

Item	Phase	Location	Monitoring Parameter/Indicator	Frequency	Responsibility for Monitoring	Monitoring Cost (GH¢)
<b>Increase in Illicit Sexual Affairs and STDs</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Number of sensitisation campaigns</li> <li>■ Number of condoms distributed to Contractors' staff working in each site in a month</li> <li>■ Number of STD cases reported to local health facilities involving encounters with Contractors staff</li> </ul>	Monthly	■ Independent Safeguards Consultant Working on behalf of the PIU	No Separate Cost (Cost to be captured in the ESMP budget)
<b>Crime and Conflicts</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Number of conflicts/cases reported to the Grievance Redress Committee/Regional Lands Officer</li> <li>■ Number of conflicts/cases dealt with by the Grievance Redress Committee and/or the Regional Lands Officers in Ho</li> <li>■ Number of crimes such as theft, defilement and rape reported, investigated, and concluded by the police involving the Contractors' workers</li> </ul>	Monthly	■ Independent Safeguards Consultant Working on behalf of the PIU	No Separate Cost (Cost is embedded in the cost of the monthly visit in Table 2)
<b>Increase in Noise and Air Pollution</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Dust (PM<sub>10</sub>)</li> <li>■ Noise (dB)</li> <li>■</li> </ul>	Monthly	■ Independent Safeguards Consultant Working on behalf of the PIU	<b>* USD1,500.00</b> (Cost covers hiring for machines and laboratory analyses for PM <sub>10</sub> in case there are complains )
<b>Accidents and Occupational Health and Safety/Community Safety</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Number of accident recorded in the Accident Record Book</li> <li>■ Number of OHS and hygiene training programmes provided for contractors' staff.</li> <li>■ Number of workers on each site wearing the appropriate PPEs</li> </ul>	Monthly	■ Independent Safeguards Consultant Working on behalf of the PIU	No Separate Cost (Cost is embedded in the cost of the monthly visit in Table 2)
<b>Solid and Liquid Waste</b>	Construction/ Operational	■ On site	<ul style="list-style-type: none"> <li>■ Number of mobile toilets and dustbins provided on site</li> <li>■ Number of times waste is lifted in a week</li> <li>■ Clean site</li> </ul>	Entire Construction period	■ Independent Safeguards Consultant Working on	No Separate Cost



Item	Phase	Location	Monitoring Parameter/Indicator	Frequency	Responsibility for Monitoring	Monitoring Cost (GH¢)
			<ul style="list-style-type: none"> <li>■ Odour</li> <li>■ Presence of human waste on site</li> <li>■ Complaints by workers within the project zone and visitors</li> </ul>		behalf of the PIU/**Regional Lands Officer	
<b>Construction Waste</b>	Construction	<ul style="list-style-type: none"> <li>■ On site</li> </ul>	<ul style="list-style-type: none"> <li>■ Clean site</li> <li>■ Number of complaints from workers and visitors to the project site</li> </ul>	Entire Construction period	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	No Separate Cost( <i>Cost is embedded in the cost of the monthly visit in Table 2</i> )
<b>Material Extraction</b>		<ul style="list-style-type: none"> <li>■ Material Source</li> </ul>	<ul style="list-style-type: none"> <li>■ Presence of valid environmental permit</li> </ul>	Once	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	No Separate Cost( <i>Cost is embedded in the cost of the monthly visit in Table 2</i> )
<b>Soil erosion and Ponding</b>		<ul style="list-style-type: none"> <li>■ On Site and Immediate project environs</li> </ul>	<ul style="list-style-type: none"> <li>■ Evidence of gullies</li> <li>■ Presences of pools of stagnant water</li> </ul>	Entire Construction period	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	No Separate Cost( <i>Cost is embedded in the cost of the monthly visit in Table 2</i> )

\*as and when required

\*\* during the operational phase

### **Estimated Cost of the ESMP**

The estimated cost for implementing this ESMP (including environmental monitoring, outside the works contract price is estimated as Twenty-Three Thousand and Six Hundred and Twenty United States Dollars (USD 23,620.00). This includes USD17,400.00 for procuring the services of an environmental and social safeguards specialist to undertake monthly monitoring as well as transportation cost and per diems.

The Land Administration Project has the responsibility of providing this amount for the implementation of the ESMP through project funds. Table 4 presents the summary cost estimates.

**Table 4: Budget for ESMP Implementation & Environmental Monitoring**

S/N #	Item	Amount (USD)
1.	<b>Two Sensitisation Programme for STDs and Distribution of Condoms</b>	2,600.00
2.	<b>Two Occupational Health and Safety Training for Site Workers</b>	2,000.00
3.	<b>Waste bins for the Ho CSAU during the Operational Phase</b>	120.00
4.	<b>Monthly Environmental Monitoring Visits</b>	17,400.00
5.	<b>Air and Noise Monitoring</b>	1500.00
6.	<b>Total</b>	<b>23,620.00</b>

*Details on items 1 to 4 can be found in Table 1 and 3  
Details on Item 4 is obtained from Table 2*

# 1. Introduction

The Government of Ghana has requested Additional Financing (AF) from the International Development Association (IDA) towards the cost of the second phase of the Land Administration Project (LAP 2). In 1999, the Ghana Government developed a National Land Policy to guide land administration and its transactions in the country. To implement the policy, a Land Administration Project (LAP 1) was developed with support from development partners including the IDA. LAP I was implemented from 2003-2011. After initial implementation challenges, the project advanced with some success stories. As a result of the improved performance and the fact that LAP 1 laid the basis for land administration in Ghana, the second phase was developed to consolidate the gains made under LAP 1.

The Project has four components:

- **Component 1:** Strengthening the Policy, Legal and Regulatory Framework for Land Administration
- **Component 2:** Decentralizing and Improving Business and Service Delivery Processes
- **Component 3:** Improved Maps and Spatial Data for Land Administration, and
- **Component 4:** Human Resource Development and Project Management

Under the Additional Financing, the following key activities, among others, will be undertaken to improve the overall outcome of LAP 2 in achieving its development objectives and to consolidate and strengthen land administration and management systems for efficient and transparent land services delivery:

- the expansion of Client Service Access Units (CSAU) to the remaining five (5) regions;
- the up-scaling of the Ghana Enterprise Land Information System (GELIS) to include the functionalities that were de-scoped during the first phase;
- establishment of new and consolidation of the operation of existing Customary Land Secretariats (CLSs); and
- Production of digital orthophoto and topographic maps for the entire country

The expansion of Client Service Access Units (CSAUs) to the remaining five (5) regions under the LAP 2 additional financing will require the construction of three office building (two new constructions and refurbishments as well as one extension). These activities have triggered two World Bank safeguard policies, the environmental assessment (OP 4.01) and the involuntary resettlement (OP 4.12). Hence, the need to prepare an Environmental and Social Impact Assessment (ESIA) with an action plan. This ESIA report is for the construction of a new CSAU office in Ho.

## 1.1 Purpose of the ESIA

Activities to be undertaken as part of the construction of CSAU in Ho include site clearing, trenching and digging foundation as well as backfilling and compacting, chiselling, tiling, painting, fixing of windows, painting and furnishing. These activities trigger safeguards issues of concerns including possibility of generating excessive noise, generation of construction waste and health and safety concerns for the contractors' employees.

These impacts /risks associated by the proposed works need to be identified, assessed and manage. The management of environmental and social issues of concern is guided by World Bank O.P. 4.01 Environmental Assessment as well as Ghana's Environmental Impact Assessment Regulation, 1999 (LI. 1652) as Amended. The purpose of the ESIA is to prevent where possible, avoid, effectively mitigate, and manage environmental and social impacts/risks that may arise from implementation of sub projects under LAP 2 funding.

## **1.2 Objectives of the ESIA**

The prime objective of this Environmental and Social Impact Assessment (ESIA) is to bring the project into compliance with applicable national environmental and social legal requirements and the World Bank's environmental and social policies.

The ESIA also seeks to identify and assess project impacts/risks as well as define and outline the avoidance mitigation/enhancement, monitoring, measures to be undertaken during project implementation and operation to prevent, minimize, mitigate, or compensate for the environmental and social impacts/risks associated with the sub project. In addition, the ESIA seeks to enhance the project's beneficial impacts.

## **1.3 Methodology**

The approach to the preparation of the ESIA is in accordance with (1) World Bank requirements set out in operational policy OP/BP 4.01 Environmental Assessment and Ghanaian Environmental Protection Agency ESIA Procedures and Guidelines as laid out in LI 1652 as amended. The assignment was carried out in three different phases, which are stated as follows:

- Site visit and inspection see (Plate 4 in Appendix B for site visit pictures);
- Literature review; and
- Public consultations (see Plate 7 to 9 in Appendix B for consultation pictures and details on consultations and disclosure in Appendix C).

## 2. Policy, Legal and Administrative Framework

### 2.1 National Environmental Requirements

#### 2.1.1 Ghana's Environmental Policy

The environment protection policy of the Government of Ghana (GoG) seeks to:

- Maintain ecosystems and ecological processes essential for the functioning of the bio-sphere;
- Ensure sound management of natural resources and the environment;
- Adequately protect humans, animals and plants, their biological communities and habitats against harmful impacts and destructive practices, and preserve biological diversity;
- Guide development in accordance with quality requirements to prevent, reduce and as far as possible, eliminate pollution and nuisances;
- Integrate environmental considerations in sectional, structural and socio-economic planning at national, regional and district levels, and
- Seek common solutions to environmental problems in West Africa, Africa, and the world at large.

The environmental policy of Ghana formulated in the National Environmental Action Plan (NEAP) of 1993 hinges strongly on “prevention” as the most effective tool for environmental protection.

The policy aims at a sound management of resources and environment, and the reconciliation between economic planning and environmental resources utilization for sustainable national development. It also seeks, among others, to institute an environmental quality control and sustainable development program by requiring prior Environmental Assessment (EA) of all developments, and to act appropriately to protect critical eco-systems, including the flora and fauna they contain against harmful effects, nuisance or destructive practices.

The adoption of the NEAP led to the enactment of the EPA Act, 1994 (Act 490); and subsequently the passing of the Ghana EIA procedures into the EA Regulations, 1992 (LI 1652).

#### 2.1.2 Environmental Sanitation Policy

The Environmental Sanitation Policy (Revised, 2010) responds to the various reviews carried out to assess how effectively the previous policy in 1999 has been implemented. The revised policy objectives and measures are presented in a way that enhances strategic planning and subsequent implementation.

### 2.2 Legal Framework

There are several laws and regulations concerned with development, health related matters and the environment in general. The major environmental laws related to this project include:

#### 2.2.1 Environmental Protection Agency, Act 490, 1994

This Act establishes the Ghana Environmental Protection Agency making it responsible for advising government on all matters relating to the environment; undertake environmental monitoring to ensure sound ecological balance and coordinating environment activities, environmental education, and research. The Act also specifies the requirements to produce an EIA for various proposed works.

### **2.2.2 Environmental Assessment Regulations 1999 (LI 1652) as Amendment (LI 1703, 2002 and LI 2228)**

This legal instrument provides guidance and ensures adequate consideration of biodiversity and related environmental and socially sensitive issues are considered during Environmental Impact Assessments in Ghana. LI 1652 outlines in broad terms, the procedures for the preparation of an environmental assessment report. It provides a graduated system for determining what will be demanded from a proponent based on the size and likely impacts of a particular project. On receipt of an application, including such information as may be required; the Agency carries out site inspection and initial assessment (screening) taking into consideration factors such as:

- Location, size and likely output of the undertaking;
- Technology intended to be used;
- Concerns of the general public, if any, and in particular concerns of immediate residents if any, and
- Land use and other factors of relevance to the particular undertaking to which the application relates.

Based on the initial assessment by the Agency, a project may merit either an environmental impact assessment or a preliminary environmental assessment. The Agency also has the power to grant an environmental permit straightaway upon screening an application or decline an application subject to a formal communication to the applicant. Applicants also have the right under this legislative instrument to appeal the Agency's decision through the Minister of Environment, Science and Innovation.

The proposed project does not fall in any of the categories listed under Schedule 2 and 3 of LI 1652 as deserving a full environmental impact assessment or preliminary environmental assessment. The proposed site, located in a civic zone with no waterbodies, natural habitats and cultural heritage site cannot be categorized as environmentally sensitive areas under Schedule 5 of the LI. Projects of this nature go through registration (application), inspection, screening and then permitting.

### **2.2.3 Local Governance Act, 2016 (Act 936)**

The Local Governance Act 2016 (Act 936) seeks to give a fresh expression to government's commitment to the concept of decentralization. It is a practical demonstration of a bold attempt to bring the process of governance to the doorstep of the populace at the regional and more importantly, the district level. The Act establishes metropolitan, municipal and district assemblies as the highest decision-making authority at the local level with powers to enforce zoning and building regulation as well as responsibility of waste management. The proposed CSAU in Ho requires approval from the Ho Municipal Assembly (Building Permit) prior to the commencement of works.

### **2.2.4 Land Use and Spatial Planning Act 2016 (Act 925)**

The Act consolidates the laws on land use and spatial planning. It provides sustainable development of land and human settlements through a decentralized planning system and ensures judicious use of land to improve the quality of life, promote health and safety in respect of human settlements. This gives a clearer direction to ensure compliance and enforcement of development regulations by the Ghanaian society. It will also contribute to a more sustainable and well-functioning land administration system that is fair, efficient, cost effective and decentralized and will enhance land tenure security in the country.

### **2.2.5 Factories, Offices and Shops Act**

The Factories, Offices and Shops Act of 1970 (Act 328) mandates the Factories Inspectorate Department of the Ministry of Employment to register factories and ensure that internationally accepted standards of providing safety, health and welfare of persons are adhered to. It defines a factory to include any premises (whether in or not in a building) in which one or more persons are engaged in manual labour, among others.

### **2.2.6 Ghana National Fire Service Act, 1997 (Act 537)**

This act makes provision for the management of undesired fires and as per the functions of the service provides technical advice for building plans in respect of machinery and structural layouts to facilitate escape from fire, rescue operations and fire management. Other functions of the service are:

- Organize public fire education programmes;
- Inspect and offer technical advice on fire extinguishers; and
- Offer rescue and evacuation services to those trapped by fire or in other emergencies.

### **2.2.7 The Fire Precaution (Premises) Regulations, 2003(LI 1724)**

The Ghana National Fire Service Act, 1997 (Act 537) states that a fire certificate will be required for premises used as a public place or place of work. This requirement is reinforced by the Fire Precaution (premises) Regulations, 2003 (LI 1724). It is incumbent on any project developer to ensure that adequate measures are introduced to minimise or prevent fire out breaks and a fire permit is obtained for development prior to the commencement of works.

### **2.2.8 The Labour Act 2003 (Act 651)**

The purpose of the Labour Act, 2003 (Act 651) is to amend and consolidate existing laws relating to employers, trade unions and industrial relations. The Act provides for the rights and duties of employers and workers; legal or illegal strike; guarantees trade unions the freedom of associations and establishes Labour Commission to mediate and act in respect of all labour issues. Under Part XV (Occupational Health Safety and Environment), the Act explicitly indicates that it is the duty of an employer to ensure the worker works under satisfactory, safe and healthy conditions.

### **2.2.9 Workmen's Compensation Law 1987 (PNDC 187)**

This Act seeks to address the necessary compensations needed to be awarded to workers for personal injuries arising out of and in the course of their employment.

## **2.3 The World Bank Safeguard Policies**

The World Bank has ten environmental and social safeguards policies, these include, Natural Habitats (OP 4.04), Forests (OP 4.36), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11), and Safety of Dams (OP 4.37) and Involuntary Resettlement, OP 4.12 and Environmental Assessment, OP 4.01. None of the above operational policies with the exception of OP 4.01 and 4.12 are triggered by this project. This is because there are no waterbodies, natural habitats and cultural heritage sites within the immediate project zone. The use of forest resources under project will be insignificant.

OP 4.01 is considered to be the umbrella policy for the Bank's environmental safeguard policies. It is used to identify, avoid, and mitigate the potential negative environmental impacts associated with Bank lending operations as well as to improve decision making, to ensure that project options under consideration are sound and sustainable, and that potentially affected people have been properly consulted.

## **2.4 World Bank Environmental Screening Categories**

Screening of sub-projects prior to their implementation is a key requirement of World Bank funded projects. Screening is carried out to decide whether a sub-project requires assessment or not, and the level of assessment that may be required. Upon screening, a determination is made for the next step and the level of assessment that will be required for each sub-project.

OP/BP. 4.01 classifies projects into four (4) categories, namely Category A, B, C and FI. Category 'A' projects are considered as highly risky, with potentially irreversible and unprecedented impacts, or complex. Such projects require full Environmental and Social Impact Assessment (ESIA). Projects are categorised as 'B', if the adverse environmental and social impacts on human populations or environmentally important/sensitive areas-including wetlands, forests, grasslands, and other natural

habitats are less adverse than those of Category 'A'. The impacts of projects under Category 'B' are site specific, few of them are irreversible, and mitigation measures are easier to be defined as compared to Category 'A' projects. Such projects require action plans such as Abbreviated Resettlement Action Plans (ARAP), Resettlement Action Plans (RAP), Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Plans (ESMPs). A project is classified as Category 'C' if it is likely to have minimal or no adverse environmental impacts. Finally, by the World Bank classification, Category 'FI' projects involve investments of the Bank funds through a financial intermediary, in projects that may result in adverse environmental impacts.

The World Bank rates this sub project as Category B under Operational Policy, 4.01. This implies that the expected environmental impacts are largely site-specific. Few, if any, are irreversible. Mitigation measures can be designed relatively readily.

## **2.5 World Bank Group EHS Guidelines, 2007**

The Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP), as defined in IFC's Performance Standard 3: Resource Efficiency and Pollution Prevention. The EHS Guidelines contain the performance levels and measures that are normally acceptable to the World Bank Group and are generally considered achievable in new facilities at reasonable costs by existing technology. For World Bank funded projects, application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets with an appropriate timetable for achieving them. The environmental assessment process may recommend alternative (higher or lower) levels or measures, which, if acceptable to IFC/World Bank, becomes project-or site-specific requirements.

## **2.6 Institutional Framework**

The Land Administration Project (LAP-2) under the Ministry of Land and Natural Resources is the implementing agency for these sub projects. Nonetheless, once the projects are completed they will be handed over to the Lands Commission. The Lands Commission was established by Article 258 of the 1992 Constitution and the Lands Commission Act, 2008 (Act 767). The functions of the Lands Commission include;

- Provides land services consisting of managing public and vested lands; surveying, mapping and maintaining national territorial boundaries; developing and maintaining national and geodetic reference network nationwide; registering title to land and other interests in land, registering deeds and other instruments affecting land, assessing compensation upon compulsory acquisition, assessing stamp duty & determining values of properties for letting, sale, purchase and rating;
- Supervisors and regulators in the land market through controlling the survey and demarcation of land for land use and registration as well as supervising, regulating and certifying the production of maps.
- Provides advice to government, MMDAs and traditional authorities on policy frameworks on land administration in coordination with Town and Country Planning Department; preparation and maintenance of valuation lists or rolls for rating purposes, acquisition of land for government and comprehensive programme for registration of title to land.
- Custodians of land related records through surveying of data on parcels of land and maps for the country, land registering that contain records of land and other interest in land, keeping records on historical land transactions, real estate valuing and claimants for compensation.

The Lands Commission has four divisions namely; Survey and Mapping Division, Land Registration Division, Land Valuation Division, Public and Vested Lands Management Division that performs different but interlinked functions. In terms of hierarchy, there is a National Lands Commission as well as ten Regional Lands Commissions run by Regional Chairmen and Regional Lands officers. The Management of the Head Office of the Lands Commission is made up of:

- An Executive Secretary;



- Two Deputy Executive Secretaries;
- Four Divisional Directors;
- Solicitor Secretary and Head Legal of Department;
- Head of Internal Audit Department;
- Head of Finance Department;
- Head of Human Resource Department; and
- Head of Research, Policy Planning and Special Projects.

Other institutions responsible for the co-ordination, planning, administration, management and control of development and environmental issues that relate to this project are the Environmental Protection Agency and the Town and Country Planning Department (TCPD).

## 3. Project Alternatives

The alternatives considered as part of the conception of this project are:

- iii. No action scenario; and
- iv. The project implementation scenario (refurbishment of the existing building)

### 3.1 No Action Scenario

The “No Action Scenario” assumes that the proposed project will not be implemented in Ho. This implies that there will be no new construction or refurbishment of offices to accommodate the Client Service Access Unit in Ho. This implies that the Client Service Access Unit of the Lands Commission in the Volta region will have to make do with the small office space allocated to them within the regional office block. Obviously, this will worsen the existing congestion as the number of land transactions in the region is increasing. This phenomenon is likely to continue into the foreseeable future.

If the status quo prevails, there will be no adverse environmental and social impacts such as noise and waste generation as well as accidents and occupational health and safety risks associated with the construction phase. This notwithstanding, the congestion within these offices reduces efficiency in responding to client needs amidst rising land transaction over time. Clients will continue to endure the inconveniences associated with shuttling among various divisions of the Commission, located in different places, in order to find the appropriate division to handle their complaint or to process their land documentation.

### 3.2 Project Implementation Scenario

Under the project implementation scenario, the CSAU in Ho will be provided either through refurbishment/extension of existing buildings or construction of new office. The expansion of the CSAU provides clients with a ‘one stop shop’ for all their land transactions. The project implementation option also relieves clients of the burden of having to shuttle among the various divisions of the Lands Commission, which in some cases, are not located in the same building.

Nonetheless, the project implementation option is associated with some adverse environmental and social impacts/risks notably generation of construction waste and work related accidents. The potential impacts/risks associated with this option are mostly short term and reversible and can be adequately mitigated and compensated for through environmental assessment.

From the foregone, the project implementation scenario is a viable option but within that option, two variants are evaluated. These are the building of new client service access units versus the refurbishment of existing office buildings. The type of building materials to be used is also analysed, that is prefab versus sandcrete.

#### 3.2.1 Construction of New Purpose Built Office Option

Constructing a new office block Ho will place the structure on land belonging to the Lands Commission. It will involve the construction of sub and super structures as well as internal works such as plumbing and external works including the provision of parking areas. These activities are associated with more consumption of environmental resources such as sand and aggregates. In addition, workers at the CSAU may have to shuttle between the CSAU and the various divisions of the Lands Commission as part of their duties. Nonetheless, this option reduces the congestion in the existing office blocks and provides space for storage of data which will enhance efficiency in the work of the other divisions. In addition, the automated system planned for new CSAU will minimise commuting to the other divisions of the Commission.

### **3.2.2 Refurbishment of Existing Office Buildings**

This option involves a re-organisation of space within the existing regional offices to fit in the CSAUs. This will be achieved through collapsing walls to merge offices and/or partitioning offices. This option will require less consumption of environmental resources such as sand and aggregates but the space that will be generated will not be fit for purpose (in adequate) as these divisional offices are already congested.

The new construction/extension option is selected over the refurbishment of existing office building because it will meet the space requirements of the Client Service Access Unit in Ho.

### **3.3 Type of Construction Material (Bricks versus Sandcrete)**

The general option is either to build with bricks or sandcrete blocks. Bricks have a lower thermal conductivity than sandcrete block (cement), therefore indoor temperature within brick buildings are lower than sandcrete buildings, given heat. Hence, using bricks lowers energy consumption and cost of cooling. In addition, bricks are cheaper bearing in mind that it eliminates painting of the structure. However, haulage distance from the factory to proposed site is far and the project may incur higher transit losses for bricks. Bricks may not be readily available at the time it required for the project.

Sandcrete (cement and sand) on the hand is readily available at shorter distances to the project site compared to bricks, which have to be sourced from factories in the Ashanti and Brong Ahafo regions. In view of this, any cost saving in the unit price of bricks over sandcrete is eroded by high haulage cost due to long haulage distances from the production areas to the project site in Ho. There is also substantial local expertise in terms of building with sandcrete compared to bricks. This implies that the project can be delivered faster when sandcrete is used compared to bricks.

From the foregone, sandcrete is preferred to bricks as the construction material for the project.

## 4. Project Description

### 4.1 Project Location and Size

The proposed project site (6°36'28.30"N; 0°27'53.82"E) is located on a 2.1-acre plot of land belonging to the Lands Commission in the Ho Municipality. It is at the intersection along the Starlets 91 Street and the Residency Road, opposite the SSNIT Office. The Residency Road and Starlets 91 Street define the northern and eastern boundaries of the site respectively. It shares a common boundary with the office of PVLMD of the Lands Commission and Department of Parks and Gardens in the South (see in Appendix A1.1 for locational map of the site).

### 4.2 Project Components

The proposed CSAU in Ho are single storey open office structures, partitioned into cubicles. There will be a back office for staff who will sort, batch and distribute documents received from clients. The facility will have a client waiting area with seats, office for a manager and an on-site bank as well as five (5) washrooms for clients and the employees (see Appendix A 1.4 for the floor plan of typical CSAU and Plate 19 and 20 in Appendix B for pictures of the exterior and interior of a typical CSAU office). It is estimated the floor area of the CSAU is 300 square metres.

### 4.3 Project Activities

Specific activities to be undertaken as part of the construction phase will include, setting out, clearing, digging and casting of concrete for the building foundation (sub structures) and masonry and carpentry works during the erection of superstructures and roofing. Other activities in the construction phase are fixing electrical fittings, plumbing, fixing of doors, windows, counters, networking, tiling of floors, external paving and landscaping as well as finishes.

### 4.4 Project Workforce, Equipment and Duration

It is estimated that a maximum of fifteen (15) workers will be on each site. These include masons' carpenters and building technicians. No work camps will be constructed as part of the project. Workers will commute to work on site daily. Some of the equipment that will be used on site are wheel barrows, concrete mixers, handheld compactors, power drills and jack hammers. The project is expected to be completed in twelve (12) months.

## 5. Baseline Conditions

The baseline information covers the project area of influence, the Volta region as well as the immediate project environs. Baseline information were acquired through the following means; site visits and inspections, literature reviews and consultations with stakeholders. The report considered the adjoining land use, natural and socio-economic environment of the project zones.

### 5.1 Adjoining Land Use

The site is located within civic zone. It is sandwiched between Residency Road and the Department of Parks and Gardens. It is situated at the eastern side of the current office of the Public and Vested Land Management Division/Land Registration Division of the Lands Commission. There are no waterbodies, natural habitats and cultural heritage site within the project zone

### 5.2 Natural Environment

#### 5.2.1 Topography

The site gently slopes towards the east with an average elevation of 609 feet above sea level.

#### 5.2.2 Climate

The mean annual temperature of Ho ranges from 16.5 0C to 37.8 0C. The rainfall pattern is characterized by two rainy seasons. The major season occurs from March to June and the minor seasons is from July to November. Mean annual rainfall figures are between 201mm and 738mm.  
Geology and Soils

There are several soil groups in the Ho municipality. These could be put into two major groups: these are forest soils and savannah soil. Examples of forest soil are forest ochrosols, lethosols and intergrades found in the mountainous and wetter northern areas of the Municipality. The savannah soil type which is sandy is found in Sokode and part of Ho Township covers the project zone.

#### 5.2.3 Ambient Air and Noise Levels

The site is located in a civic zone. The only source of noise and emission is moving vehicles on the Starlets 91 Street and the Residency Road.

### 5.3 Socio-Economic Characteristics of the Project Beneficiaries

#### 5.3.1 Population of the Sphere of Influence

Although the CSAU will be located in the Ho Municipality, it will serve the Volta Region. The population of the Volta Region is 2,118,252. Of these 1,019,398 (48.6%) are males and 1,098,854 (51.4%) are females.

#### 5.3.2 The Local Economy

About 64.5 percent of the population aged 15 years and older is economically active while 35.5 percent are economically not active. Of the economically active population, 93.6 percent are employed while 6.4 percent are unemployed. Of the employed population, about 21.4 percent are engaged in agriculture and related activities, 26.8 percent are in services and sales while 22.6 percent are into craft and related trade. 15.8 percent are managers, professionals and technicians.

#### **5.4 Economic Activities on the Site**

There are five (5) petty traders on the site consisting of two males and three females. Both males are lotto operators while the three females are food vendors. These traders will not be affected by the project as they are a good 50 metres away from where the CSAU is to be sited.

#### **5.5 Infrastructure on Site**

Water to the site for construction purposes and for use by staff during the operational phase will be from Ghana Water Company Limited. Power for the proposed development will be tapped from an existing 415 KV line within the vicinity (along Residency Road). There is a transformer situated on the proposed project site.

## 6. Potential Environmental and Social Impacts/Risks

### 6.1 Introduction

The project activities including site clearing, trenching, block laying, plastering, tiling, compacting, painting, fixing windows and doors will lead to a number of anticipated impacts/risks. This chapter presents the anticipated social and environmental impacts/risks of the sub projects. Prior to this, Table 5 presents how the impacts/risks were assessed.

**Table 5: Definition for Level of Impacts**

Term	Definition
<b>Nature of Predicted Impacts</b>	
<b>Neutral</b>	No overall environmental impact.
<b>Adverse</b>	Negative environmental impact.
<b>Beneficial</b>	Positive environmental impact.
<b>Significance of Predicted Impacts<sup>(1)</sup></b>	
<b>Insignificant</b>	Impact either too small to be measured or, even if quantifiable, not causing any material change in the environment.
<b>Minor</b>	Impact capable of causing change in the environment but not fundamentally affecting the status, potential productivity, or usage of the environment.
<b>Significant</b>	Impact capable of causing sufficient change in the environment to affect the status, potential productivity, or usage of the environment.
<b>Duration of Predicted Impacts<sup>1</sup></b>	
<b>Short-term</b>	Impact persisting for six months or less (i.e., during construction period).
<b>Medium-term</b>	Impact persisting for between six months and two years (i.e., during initial operations)
<b>Long-term</b>	Impact persisting for longer than two years

<sup>1</sup>The classification of an impact as temporary, short-term, or long-term is purely descriptive and does not, of itself imply a degree of significance or acceptability (thus, a temporary impact may also be a significant impact, whilst a long-term impact may be insignificant).

Source: Adapted from AES SONEL (2009).

### 6.2 Beneficial Impacts

The following are the anticipated positive social and environmental impacts associated with the proposed construction of the CSAU in Ho.

### **6.2.1 Employment and Income Opportunities**

#### ■ *Construction Phase*

Short-term employment opportunities will be generated for unskilled, semi-skilled and skilled labour in the construction sector, ranging from masons, carpenters to building technicians to architects during the construction phase of the project. This will lead to improved income profile for workers on the sub-project. In addition, local food and other vendors and itinerant traders will provide food and other services for the site workers. It is estimated that 15 persons will be directly employed on site during the construction phase of the project. Although both direct and indirect employment opportunities created by the project will generate income for beneficiaries, employment generated during the construction phase will be insignificant, short term but regional.

### **6.2.2 Improved Working Efficiency**

#### ■ *Operational Phase*

The provision of additional working space will enhance the efficiency delivery of services at CSAUs. Bigger office space implies less congestion and improve storage and retrieval of files leading to better turnaround time for clients who will be accessing the CSAUs. This impact is significant, regional and long term.

### **6.2.3 Reduced Drudgery in Land Transactions**

#### ■ *Operational Phase*

The provision of a one stop shop for all lands transaction and enquiries in these three regions saves clients and the general public the drudgery associated with shuttling among the three divisions of the Lands Commission to make enquiries and/or transact business. It must be noted that in Ho, for example, the divisions are not located in the same area. This beneficial impact is significant, regional and long term.

## **6.3 Adverse Impacts**

### **6.3.1 Impact on Material Sources**

The opening of sand and burrow areas to extract construction materials like sand and gravel for the civil works would lead to the creation of pits. Rainwater will collect in the burrow pits and depressions, creating pools of stagnant water, if they are not re-instated. Stagnant water provides a suitable habitat for the breeding mosquitoes and snails that are vectors for the bacteria that cause malaria and bilharzias respectively. The excavated trenches and pits could serve as death trap for animals and human beings in the vicinity of the sand and burrow pits. The impact of the project is significant, short term and regional.

### **6.3.2 Increase in Soil Erosion and Ponding**

#### ■ *Construction Phase*

Site clearing and trenching will loosen the top soil particles causing erosion, while soil compact will breakdown the soil structure. Loose soils will erode under the action of wind and water to create gullies on site. The eroded materials can drift under the influence of wind and water to clog local drains within the project zones. This may result in ponding adjoining land uses, when it rains. This impact is minor, short-term and localized.

### **6.3.3 Air Pollution**

#### ■ *Construction Phase*

Exposure to cement dust, emission from paints, thinners and pesticides for treating wood and other solvents as well as delivery vehicles can reduce ambient and in-door quality and put site workers at the risk of respiratory tract diseases. This risk is rated minimal, short term and localised.



#### **6.3.4 Noise Generation**

- *Construction Phase*

Intermittent noise would be generated during the implementation of construction activities such as mixing concrete and roofing. Background noise level at the site and its immediate environs may also slightly increase intermittently due to the movement of delivery vehicles and haulage trucks entering or exiting the site during the construction phase. Intermittent increase in noise levels can inconvenience among workers on site. The impact of elevated noise levels is rated minor as the nearest facility, office the Public and Vested Land Management Division of the Lands Commission is about 100 metres away, short term and localised.

#### **6.3.5 Generation of Waste**

- *Construction Phase*

Activities on site, including, site clearing, block work, plastering, painting, laying of tiles and fixing of doors and windows will produce waste materials such as concrete residue, broken cement blocks, cement paper, nails, empty paint containers, debris and pieces of wood. Construction waste, if not collected and well stored and disposed of could cause accidents, obstruct the movement of the workers, vehicles and equipment on site. The waste will therefore have to be managed during the construction period.

Workers on site will also generate human waste and refuse. The waste, if not promptly collected and disposed of can clog drainage channels as well as facilitate the outbreak and spread of sanitary related diseases like cholera. Human waste and refuse also give of foul odour.

- *Operational Phase*

Waste streams that will be generated by workers and clients who visit the office during the post construction phase of the project includes paper, plastics and food residue. The generation of waste will have significant impacts on workers at the office in terms of public health as well as reducing the amenity value of the facilities, if not well managed.

Generation of solid and liquid waste during the construction and operational phase of the project is a significant impact because of its association with sanitary related diseases like malaria and cholera. It is long term and regional.

#### **6.3.6 Accidents/ Occupational Health and Safety Risks**

- *Construction Phase*

Exposure to dust/emission during site clearing as well as mixing of concrete and elevated noise level within the work environment could also have negative implications on the health of the site workers during the construction phase of the project. Work related accidents such as burns, falls and cuts may also occur due to human errors, workers not wearing appropriate PPEs required for their assignments and mechanical faults on equipment. Accidents may also result from improper storage of equipment, paints and other solvents and construction materials as well as poor management of construction waste. Another source of accidents during the construction phase of the project is human-vehicular conflicts as equipment and supplies are transported to the site and waste is hauled from the construction site to designated disposal site. Accidents of this nature can result in spills, destruction of property, injuries and fatalities on site.

Accidents and work related morbidity and mortality risks on all the three site are rated significant because of their capacity to be life threatening but localised and short term.

### **6.3.7 Community Health and Safety Risks**

#### ■ *Construction Phase*

During the construction phase works in there will be excavation of trenches on site. If the site is not hoarded, safety signs are not provided and trenches are not covered quickly and/or well protected, then the general public will be at risk of accidental falls, being hit by falling objects or cuts. These accidents can cause injuries and fatalities.

Haulage tracks supplying materials to the site may also be involved in accidents which may involve residents of the communities along the haulage routes. Such accidents can cause injuries, fatalities, loss of property and/or traffic disruptions along the haulage routes. Community health and safety risks on all the site are rated significant, regional and short term.

### **6.3.8 The Incidence of Crime and Conflicts**

#### ■ *Construction Phase*

Civils works can be associated with theft and pilfering of construction materials normally from the general public and site workers. Site workers can also steal from the offices within the project environs. Other crimes include sexual harassment, illicit sexual affairs and rape as well as defilement, which are criminal under the laws of Ghana.

There may also be conflicts arising out of accidents and destruction of property by the contractors' work force, equipment on vehicles. Crimes and conflicts are rated as significant, regional but short term.

### **6.3.9 Disruption of Utility Supply**

#### ■ *Construction Phase*

Electricity and water supply to residents and organisations within the project zone may be temporary suspended in order to tie in the facilities to the mains during the construction phase of the project. This may cause inconvenience to workers and businesses within the project vicinity. This impact is minor, localised short term.

## 7. Environment and Social Management Plan

### 7.1 Introduction

This chapter provides a description of the measures that will be implemented to minimize the social and environmental impacts of the proposed sub project as well as an indication of the responsibilities of organizations and individuals who will be involved in the implementation of the ESMP and environmental and social monitoring of the project. The estimated cost of the environmental and social management plan is also presented in this chapter.

### 7.2 Environmental and Social Management Plan (ESMP)

Positive and negative environmental and social impacts will occur through implementation of the proposed construction works and may emerge in the short, medium, and/or long term. The ESMP is presented in Table 6 below shows the:

- Identified impacts/risks;
- Actions for mitigation related to each impact;
- Responsible agencies; and
- Responsibility for supervision.

In addition, a monitoring plan has been prepared indicating the parameters to be monitored, phase, frequency, location, responsibility and cost of monitoring as well as monitoring indicators.

Also attached in the Appendices ([Appendix D](#)) are environmental and social clauses. These contractual clauses are to be inserted in the bid/contract documents and enforced during the construction phase of the project.

**Table 6: Environmental & Social Management Plan for the CSAU in Ho**

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
<b>Erosion and Ponding</b>	Construction	<ul style="list-style-type: none"> <li>■ Site clearing will be staggered.</li> <li>■ Only areas required for construction will be cleared</li> <li>■ Material stockpiles will be bonded and covered with tarpaulin or an approved material</li> <li>■ Site clearing will be authorised only by the Supervising Consultant</li> </ul>	Project Site	Project Contractors	Supervising Consultant	<b>No Separate Cost</b> (Cost included in the BOQ)
<b>Impact on Material Sources</b>	Construction	<ul style="list-style-type: none"> <li>■ Existing trees on site will be incorporated into the project design as much as possible</li> <li>■ Every tree felled on site under this project will be replaced four fold and nurtured for six months</li> <li>■ No sand/burrow pit will be opened by the Contractors</li> <li>■ Contractors will procure materials (sand and aggregates) from Ghana EPA certified suppliers</li> <li>■ Cost of re-instatement of material sources is implicit in the unit cost of the various materials (sand, gravel and quarry products)</li> </ul>	Burrow pits/ Quarries	Suppliers	Contractor/ Supervising Consultant	<b>No Separate Cost</b> (Cost is covered in the unit cost materials)
<b>Air and Noise Pollution</b>	Construction	<ul style="list-style-type: none"> <li>■ Workers of Public and Vested Land Management Division of the Lands Commission and petty traders within the project environs will be notified at least 24 hours ahead of any excessive dust and noise generation activities</li> <li>■ The site will be hoarded with aluminium sheet or an approved material by the Supervising Consultant</li> <li>■ All equipment will be service at least once a month</li> <li>■ Painters and workers engaged in the treatment of wood will made to wear in nose masks, gloves overall and boots;</li> <li>■ Noise generation activities and delivery of supplies will be undertaken over the weekends and before 8.00 am and after 5.00pm</li> <li>■ Equipment and vehicles will be turned off when not in use</li> <li>■ Debagging of cement will be done in an enclosed area by workers wearing appropriate Personal Protective Equipment (PPE) such as hard hats, reflector jackets,</li> </ul>	Project Site/Immediate Project Environs /Along Haulage routes	Project Contractor	Supervising Consultant	<b>No Separate Cost</b> (Cost included in the BOQ)

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
		<p>overalls and others such as nose masks, hand gloves and ear plugs.</p> <ul style="list-style-type: none"> <li>Haulage and delivery trucks as well as equipment on haulage routes will be made to drive at less than 20km/h</li> <li>Exposed surfaces will be watered at least twice a day</li> <li>Concrete mixers will be fitted with mufflers;</li> <li>Cover haulage trucks with tarpaulin</li> </ul> <p>Construction equipments will be shut down when not in use</p>				
<b>Generation of Waste</b>	Construction	<ul style="list-style-type: none"> <li>Off cuts from pipes and electrical fittings as well as broken tiles will be reused for other civil works elsewhere;</li> <li>Wood residue, cement blocks and other waste will be used as fill material;</li> <li>Waste that cannot be reused will be transported to the approved landfill site;</li> <li>Empty paint and solvent containers will be collected and kept in a well ventilated store room with a paved floor and returned to suppliers to be re-used;</li> <li>Two mobile toilets and three refuse bins will be provided on site;</li> <li>Mobile toilets will be dislodged after close of work every day</li> <li>Refuse will be collected by a private refuse collection company three times a week</li> </ul>	Project Site	Project Contractor	Supervising Consultant	<b>No Separate Cost</b> (Cost included in the BOQ)
	Operational	<ul style="list-style-type: none"> <li>Three (3) refuse bins will be provided on the premises,</li> <li>Refuse bins will be emptied three times a week by the private waste collectors</li> <li>Liquid waste will be channelled into septic tanks to be constructed as part of the CSAU.</li> <li>Septic tanks will be dislodged once a year.</li> </ul>	At the premises of the new CSAU	Regional Lands Officer	Lands Commission	<b>USD 120.00</b> (Cost covers USD 120.00 the supply of 3 refuse bins @ USD 40.00 per bin)
<b>Accidents/ Occupational Health and Safety Risks</b>	Construction	<ul style="list-style-type: none"> <li>The site will be hoarded to prevent unauthorised persons from accessing the work areas;</li> <li>Hoarding of the site will be undertaken using aluminium sheets or an approved material by the Supervising Consultant;</li> <li>Trenches will be covered immediately they are not required;</li> <li>All trenches will be barricaded with caution tape;</li> </ul>	Project Site	Project Contractor	Supervising Consultant	<b>USD 2,000.00</b> (Cost covers the organisation of two occupational health and

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
		<ul style="list-style-type: none"> <li>■ Water collected in trenches will be pumped out daily after work;</li> <li>■ Equipments and vehicles will be turned off when not in use</li> <li>■ Cement should be debagged in an enclosed area by workers wearing nose masks, overall and boots;</li> <li>■ Scaffolds will be used for activities above 2 metres</li> <li>■ Scaffolds will be on solid footings not on boxes, loose bricks and stones, etc.;</li> <li>■ Scaffolds will have guardrails, midrails and toe boards;</li> <li>■ Scaffolds will be mounted be at least 3 m away from any electric power line.</li> <li>■ Scaffolding will be inspected each time it is mounted by a competent site engineer (Supervising Consultant)</li> <li>■ Two mobile toilets and three refuse bins will be provided on site for site workers;</li> <li>■ Prohibitive, warning and directional signs will be provided on site;</li> <li>■ All workers will undergo medical screening before they are employed on site;</li> <li>■ Only healthy workers will be employed on site;</li> <li>■ Potable water will be provided for site workers;</li> <li>■ At least two (2) fire extinguishers, three (3) First Aid Kit will be provided on site and made accessible to site workers to use in case of emergency;</li> <li>■ All workers will be given contracts specifying the type of work they are to undertake and their remuneration package as well as the conditions of service in line with the Labour Act, 2003;</li> <li>■ Personal Protective Equipment (PPE), namely, hard hats, reflector jackets, overalls and boots will be provided for all workers on site and others such as nose masks, hand gloves and ear plugs will be provided for workers whose tasks require these PPEs;</li> <li>■ The use of PPEs will be enforced by the Contractor</li> <li>■ Clear sanctions and rewards for non-compliance and compliance respectively will captured in the Code of Conduct to be signed by the contractor and their employees;</li> <li>■ A Health and Safety Officer will be employed to oversee the health and safety aspects of the works, hold daily briefing</li> </ul>				<i>safety training programme for each of the Contractor)</i>

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
<b>Public and Health Risks</b>		<p>sessions (tool box meetings) with site workers prior to commence of work and enforce a No PPE–No site entry policy;</p> <ul style="list-style-type: none"> <li>■ The contact numbers of the nearest health facility, fire station and police station will be pasted at a visible point on site; and</li> <li>■ Conduct one training programme in occupational health and safety for the employees of the contractors</li> </ul>	Project Site	Project Contractor	Supervising Consultant	<b>No Separate Cost</b>
		<ul style="list-style-type: none"> <li>■ Ensure that delivery trucks and construction vehicles drive below the 20km/hr speed limit;</li> <li>■ Schedule delivery of materials to before working hours (9.00am to 5.00pm) on weekdays or deliver over the weekend;</li> <li>■ Cordon off the section of the buildings to be refurbished to prevent unauthorised persons from accessing the working zone;</li> <li>■ Visitors on the site will provided/required to wear with safety gear e.g. reflector vests, hard boots and helmets</li> <li>■ Provide warning, mandatory, prohibitive and directional signs to guide site workers and visitors who will access the project buildings during the construction phase</li> <li>■ The contractor will paste the company’s contact boldly on all vehicles and equipment</li> </ul>				
<b>HIV/AIDS, STI and Illicit Sexual Affairs</b>	Construction	<ul style="list-style-type: none"> <li>■ The contractors’ employees will be sensitised on the dangers associated with illicit sexual affairs two (2) times during the project duration e.g. risk of catching STDs and criminality</li> <li>■ Two HIV/AIDS/STI Awareness training will be provided for employees of the contractor prior to the commencement</li> <li>■ 200 condoms will be distributed among contractor’s employees every month</li> <li>■ A Code of Conduct will be prepared for contractor’s employees to inform them the sanctions for rape, defilement and other illicit sexual affairs (see Appendix F sample guideline for preparing a Code of Conduct)</li> <li>■ Contractual clauses against rape, defilement and other illicit affairs as well as child and forced labour and discrimination</li> </ul>	Project Site	Project Contractor	PIU	<p><b>USD 2,600.00</b></p> <p><i>(Cost includes USD 600.00 for procuring 200 condoms for twelve months @ USD 0.5 per condom, and USD 2,000.00 for two HIV/AIDS and STI awareness programmes for workers @ USD 1,000.00 per training session)</i></p>

Impact	Phase	Mitigation Measures	Location	Responsibility of Implementing Mitigation Measures	Supervision	Cost USD
		by sex, ethnicity, etc. will be inserted in the Contractor's Contract document				
<b>Increase Crime and Conflict</b>	Construction	<ul style="list-style-type: none"> <li>■ Regional Lands Officer and Grievance Redress Committee will resolve localised conflicts</li> <li>■ Crimes such as theft, rape and defilement will be reported to the nearest police station directly or through the grievance redress committee</li> <li>■ Employees who engage in criminal activities will be summarily dismissed and handed over to the police</li> </ul>	Project Site	Supervising Consultant	PIU	<b>No Separate Cost</b> (There is a project GRM already in place)
<b>Disruptions in the Supply of Utility</b>	Construction	<ul style="list-style-type: none"> <li>■ Organisations in the project zone will be given at least 24 hours' notice before any power outage/cut in water supply is occasioned on account of the project</li> </ul>	Project Zone	Supervising Consultant	Regional Lands Officer	<b>No Separate Cost</b>



### **7.3 Environmental and Social Monitoring**

Although the Lands Commission will be solely responsible for the monitoring of the ESMP, other institutions namely EPA, Ministry of Lands and Natural Resources and the various assemblies may undertake ad hoc monitoring of the environmental and social performance of the project. Relevant legislative instruments such as Act 936 and Act 490 back the oversight and monitoring roles assigned to these agencies. The World Bank will also undertake implementation support missions and recommend capacity strengthening and other measures in support of good environmental governance and industry practices. The monitoring roles of other non-state actors such as the public will also be complementary in ensuring smooth project implementation and sound environmental performance by the Contractor.

The Lands Commission has a PIU in charge of implementing the Land Administration Project. Since the PIU of the Lands Commission does not have an in-house environmental and social safeguards specialist, it intends to procure a short-term environmental and social safeguards specialist to undertake monthly monitoring of the civil works during the construction phase of the project.

The monitoring roles are presented in Table 7.

**Table 7: Environmental & Social Monitoring Plan**

Item	Phase	Location	Monitoring Parameter/Indicator	Frequency	Responsibility for Monitoring	Monitoring Cost (GH¢)
<b>Increase in Illicit Sexual Affairs and STDs</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Number of sensitisation campaigns</li> <li>■ Number of condoms distributed to Contractors' staff working in each site in a month</li> <li>■ Number of STD cases reported to local health facilities involving encounters with Contractors staff</li> </ul>	Monthly	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	No Separate Cost <i>(Cost to be captured in the ESMP budget)</i>
<b>Crime and Conflicts</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Number of conflicts/cases reported to the Grievance Redress Committee/Regional Lands Officer in Ho</li> <li>■ Number of conflicts/cases dealt with by the Grievance Redress Committee and/or the Regional Lands Officers in Ho</li> <li>■ Number of crimes such as theft, defilement and rape reported, investigated, and concluded by the police involving the Contractors' workers</li> </ul>	Monthly	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	No Separate Cost <i>(Cost is embedded in the cost of the monthly environmental monitoring visits in Table 8)</i>
<b>Increase in Noise and Air Pollution</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Dust (PM<sub>10</sub>)</li> <li>■ Noise (dB)</li> <li>■</li> </ul>	Monthly	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	<b>* USD1,500.00</b> <i>(Cost covers hiring for sampling machines and laboratory analyses for PM<sub>10</sub> in case there are complains )</i>
<b>Accidents and Occupational Health and Safety/Community Safety</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Number of accident recorded in the Accident Record Book</li> <li>■ Number of OHS and hygiene training programmes provided for contractors' staff.</li> <li>■ Number of workers on each site wearing the appropriate PPEs</li> </ul>	Monthly	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	No Separate Cost <i>(Cost is embedded in the cost of the monthly environmental monitoring visits in Table 8)</i>

Item	Phase	Location	Monitoring Parameter/Indicator	Frequency	Responsibility for Monitoring	Monitoring Cost (GH¢)
<b>Solid and Liquid Waste</b>	Construction/ Operational	■ On site	<ul style="list-style-type: none"> <li>■ Number of mobile toilets and dustbins provided on site</li> <li>■ Number of times waste is lifted in a week</li> <li>■ Clean site</li> <li>■ Odour</li> <li>■ Presence of human waste on site</li> <li>■ Complaints by workers within the project zone and visitors</li> </ul>	Entire Construction period	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU/</li> <li>■ **Regional Lands Officer</li> </ul>	No Separate Cost (Cost is embedded in the cost of the monthly visit in Table 8)
<b>Construction Waste</b>	Construction	■ On site	<ul style="list-style-type: none"> <li>■ Clean site</li> <li>■ Number of complaints from workers and visitors to the project site</li> </ul>	Entire Construction period	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	No Separate Cost (Cost is embedded in the cost of the monthly visit in Table 2)
<b>Material Extraction</b>		■ Material Source	<ul style="list-style-type: none"> <li>■ Presence of valid environmental permit</li> <li>■ Well protected site</li> </ul>	Two times	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	No Separate Cost (Cost is embedded in the cost of the monthly environmental monitoring visits in Table 8)
<b>Soil erosion and Ponding</b>		■ On Site and Immediate project environs	<ul style="list-style-type: none"> <li>■ Evidence of gullies</li> <li>■ Presences of pools of stagnant water</li> </ul>	Entire Construction period	<ul style="list-style-type: none"> <li>■ Independent Safeguards Consultant Working on behalf of the PIU</li> </ul>	<b>No Separate Cost</b> (Cost is embedded in the cost of the monthly environmental monitoring visits in Table 8)

\*as and when required (complaints are made by workers in the immediate project environs)

\*\* during the operational phase

## 7.4 Institutional Arrangements for Implementing the ESMP

The Land Administration Project is solely responsible for the implementation of ESMP during the construction phase. The Project has PIU but it is without environmental and social specialist to monitor the implementation of the ESMP. The PIU will be responsible for the following:

- i. the insertion of relevant mitigation measures (to cost) in the bidding documents prior to its advertisement;
- ii. the insertion of the environmental and social clauses in the construction and supervision contracts;
- iii. review environmental reports submitted by the project contractors and supervising consultants during the construction phase on agreed template/frequency/mechanism;
- iv. monitoring the environmental, social, health and safety performance (compliance and non-compliance) of works contractors during the implementation of the works; and
- v. Enforcement of the requirements within the ESMP

Since the PIU is not staffed with environmental and social safeguards specialists, it intends to procure the services of a short-term individual environmental and social safeguards specialist to perform the functions enumerated above on behalf of the PIU.

The specialist shall have at least a master's degree in environmental science, environment and development, environmental management or development studies with a minimum ten years post qualification experience and membership of a relevant professional body. He/she shall be familiar with the World Bank environmental and social safeguards policies, Ghana's environmental laws and building regulations that relate to the proposed sub projects. He/She will show evidence of undertaking at least two environmental and social monitoring assignments in the past two years.

The estimated cost of the monthly monitoring visits by the Environmental and Social Expert are presented in Table 8.

**Table 8: Cost of Monthly Monitoring Visit to the Ho Site During the Construction Phase**

Item	Days per Trip	Number of Monitoring Trips during the Construction Phase	Unit Cost USD	Total Cost
<b>Fees</b>	3	12	300.00	10,800.00
<b>Vehicle Rental</b>	2	12	150.00	3,600.00
<b>Fuel</b>	1	12	100.00	1,200.00
<b>Per diem</b>	1	12	150.00	1,800.00
<b>Total</b>	-	-	-	<b>17,400.00</b>

\*12 monitoring visits are anticipated over the 12-month project implementation duration

In addition, there will be a supervising consultant (engineer or architect) on each site charged with the day-to-day supervision of the works. He/she will be responsible for enforcing environment, social, health and safety provisions in the ESMP and the works contract. The responsibilities of the supervising consultant will also include ensuring that recommendations proffered by the environmental and social safeguards specialist during his/her monthly monitoring visits are carried out within the specified timelines.

## 7.5 Operational Phase Management of the Facility

During the post construction phase of the project, the Lands Commission will be responsible for the management of the office. The Regional Lands Officer will manage the new office as part of the assets of the Commissions through their annual subvention.

## 7.6 Environmental Reporting and Disclosure

LAP 2 PIU will disclose the ESIA on its website, once it is approved by the project and cleared by the World Bank. Hard copies of the ESIA shall also be placed in the Head and Regional offices of the Lands Commission, the PIU office as well as the Ho Municipal Assembly for public viewing throughout the construction phase of the project. The World Bank will disclose the ESIA at the World Bank’s External Website.

As part of monitoring the ESMP, it is expected that the Supervising Consultants will dedicate a chapter in their monthly progress reports to present the state of the environmental and social safeguards on the project. This will be validated by the Independent Environmental and Social Safeguards Expert procured by the PIU. The report should include but not limited to:

- i. Contractors’ performance on implementing environmental and social safeguards;
- ii. Progress on implementing mitigation measures in relation to the identified impacts;
- iii. Emerging impacts and proposed mitigation measures (if encountered);
- iv. A presentation on parameters monitored in the reporting month; and
- v. Activities to be taken in the next month;

## 7.7 Estimated Cost of the ESMP

The estimated cost for implementing this ESMP and environmental and social monitoring, outside the works contract price is estimated as Twenty-Three Thousand and Six Hundred and Twenty United States Dollars (USD 23,620.00). The Land Administration Project has the responsibility of providing this amount for the implementation of the ESMP through project funds. Table 9 presents the summary cost estimates.

**Table 9: Budget for ESMP Implementation & Environmental Monitoring**

S/N #	Item	Amount (USD)
1.	<b>Two Sensitisation Programme for STDs and Distribution of Condoms</b>	2,600.00
2.	<b>Two Occupational Health and Safety Training for Site Workers</b>	2,000.00
3.	<b>Waste bins for the Ho CSAU during the Operational Phase</b>	120.00
4.	<b>Monthly Environmental Monitoring Visits</b>	17,400.00
5	<b>*Air and Noise Monitoring (Sampling)</b>	1,500.00
6.	<b>Total</b>	<b>23,620.00</b>

*Details on items 1 to 4 can be found in Table 6*

*Details on Item 4 can be found in Table 8*

*\*As and when complaint is made by workers in the project environs*

## 8. Emergency Response Procedures on Site

Response measures have been proposed for the following emergencies which may arise during project implementation:

- Fire;
- Medical or Accident; and
- Oil Spills.

### 8.1 Fire Emergency

#### 8.1.1 Small Fires

Small fires are put out quite safely. A simple fire-fighting procedure to put out a small fire is provided below:

- The first person to sight the fire must sound the fire alarm if at the workshop/work zone/ office premises or shout, 'FIRE!! FIRE!! FIRE!!', if at the construction zone;
- Workers trained to use fire extinguishers are permitted to fight fire on site;
- All others must evacuate the area;
- Tackle fire in its very early stages at the source;
- Always put your own and other people's safety first;
- Make sure you can escape if you need to and never let a fire block your exit;
- Never tackle a fire if it is from a position against the prevailing wind direction and if the source cannot be determined. If in an enclosed area such as workshop/office premises, never tackle a fire if it is starting to spread or has spread to other items in the room or if the room is filling with smoke;
- If the situation is solved, the Environment, Social Health and Safety Officer of the Contractor will investigate the reason for the fire and clean the place; and
- Report to the Supervising Engineer for the necessary precautionary measures to be undertaken.

#### 8.1.2 Large Fires

These are fires that cannot be put out by the trained fire volunteers and the GNFS will have to be called to fight it. The evacuation procedures to follow include:

- The first person to sight the fire must sound the fire alarm if at the warehouse/workshop/office premises or shout, 'FIRE!! FIRE!! FIRE!!', if at the construction zone/workshop;
- Evacuate the building or area and report at the ASSEMBLY POINT;
- Immediately notify the Environment, Social Health and Safety Officer of the Contractor and call the Ghana National Fire Service;
- Contact numbers of the nearest fire station will be conspicuously displayed at site office, storeroom, workshop and security post;
- The Environment, Social Health and Safety Officer of the Contractor has to check on remaining workers and carry out a fast, calm and secured evacuation;
- A head count will be conducted to ensure all workers are safe and present;
- If there have been any casualties, they will be conveyed to the nearest health facility; and
- Keep records of any injuries and the fire event and report to the Supervising Consultant

### 8.2 Medical or Accidents

In the event of any accident or injury the procedures to follow include:

- If it is a minor accident/injury and the victim can move, he/she should report to the Environment, Social, Health and Safety Officer of the Contractor;

- The Environment, Social, Health and Safety Officer of the Contractor, who is trained in administering first aid, will treat the injury;
- He/ She will decide if the victim needs further treatment at the Medical Centre and if so will arrange for the victim(s) to be sent to the nearest health facility immediately;
- The Environment, Social Health and Safety Officer of the Contractor will investigate and take records of the accident/injury including the source and cause of the accident/injury;
- If the accident/injury is such that the victim cannot move by him/herself but can be moved, the workers present should assist the victim to the Environment, Social Health and Safety Officer of the Contractor to administer first aid and arrange for the person to be sent to the nearest health facility immediately. If the accident/injury is such that the victim cannot be moved, the workers present should put him in a stable condition and immediately call the Environment, Social Health and Safety Officer of the Contractor to immediately arrange for medical staff from the nearest health facility to be brought to the site to attend to the victim (s). All accidents and injuries will be recorded by the Environment, Social Health and Safety Officer of the Contractor and reported to Supervising Consultant.

### **8.3 Oil/Solvent Spills**

Oil spills may involve spillages of fuel and lubricants which may occur while in storage or in use on hard surfaces (concreted/ tiled/paved floor) such as at storage sheds/rooms, workshop or on the ground.

#### **8.3.1 Spillage on Hard Surface**

Immediately contain the spillage using saw dust provided at the site to prevent it from spreading. Collect the used saw dust, wash the surface with a lot of water and disinfectant and report to the Environment, Social Health and Safety Officer of the Contractor who will decide the appropriate disposal of the used saw dust. If the spilled product gets into contact with any part of the body, quickly wash the body part with a lot of clean running water and immediately report to the Supervising Consultant.

#### **8.3.2 Spillage on the Ground**

- Immediately use a shovel to scoop the contaminated soil into a container.
- Ensure to scoop beyond the contaminated area to ensure no contaminated soil is left uncollected.
- Immediately report to the Environment, Social Health and Safety Officer of the Contractor and dispose of the contaminated soil at the approved land fill site;
- If the spilled product gets into contact with any part of the body, quickly wash the body part with a lot of clean running water and immediately report to the Environment and Safety Manager; and
- Report the incident to the Supervising Consultant.

## 9. Grievance Redress Mechanisms

### 9.1 Basis for Grievance Redress Mechanism

The consultation processes showed that the execution of the project will generate environmental and social concerns notably accidents involving the general public. These will create some grievances that must be addressed.

### 9.2 Grievance Redress Process

There is no ideal model or one-size-fits-all approach to grievance resolution. The best solutions to conflicts are generally achieved through localized mechanisms that take account of the specific issues, cultural context, local customs, and project conditions and scale. In its simplest form, grievance mechanisms can be broken down into the following primary components:

- Receiving and registering a complaint;
- Screening and assessing the complaint;
- Formulating a response;
- Selecting a resolution approach;
- Implementing the approach;
- Announcing the result;
- Tracking and evaluating the results;
- Learning from the experience and communicate back to all parties involved; and
- Preparing timely reports to management on the nature and resolution of grievances.

### 9.3 Expectation When Grievances Arise

When local people present a grievance, they expect to be heard and taken seriously. Therefore, the PIU of Land Administration Project and others such as the Supervising Consultant and Regional Lands Officers involved in one aspect of the project or the other must convince people that they can voice grievances and work to resolve them without retaliation. All or any of the following is or are expected from the project management/channel of grievance resolution by aggrieved party or parties:

- acknowledgement of their problem;
- an honest response to questions/issues brought forward;
- an apology, adequate compensation or mitigation; and
- modification of the conduct that caused the grievance and some other fair remedies.

### 9.4 Management of Reported Grievances

The procedure for managing grievances should be as follows:

- The affected person files his/ her/their grievance(s), relating to any issue, verbally, in writing or via telephone to the project Regional Lands Officer. Where such are written, the grievance note should be signed and dated by the aggrieved person. Where complaints are received via phone, the call recipient should document all details;
- A selected member of the Grievance Redress Committee will act as the Project Liaison Officer who will be the direct liaison with aggrieved parties in collaboration with an independent agency person to ensure objectivity in the grievance process;
- Where the affected person is unable to write, the local Project Liaison Officer will write the note on the aggrieved person's behalf;
- Any informal grievances will also be documented

### 9.5 Monitoring Complaints

The Project Liaison Officer will be responsible for:

- Providing the Grievance Redress Committee with a weekly report detailing the number and status of complaints;
- Any outstanding issues to be addressed;



- Monthly reports, including analysis of the type of complaints, levels of complaints, actions to reduce complaints and initiator of such action.

## **9.6 Grievance Redress Institutions**

A three-tier grievance redress mechanism has been designed in the event of dissatisfaction of any aspects of project implementation. These are:

### **9.6.1 Regional Lands Officer**

The Regional Lands Officer will be the first point of call in the event of any grievance arising out of the implementation of the works. He/She will receive, document, investigate and provide feedback on the lodged grievance within 3 working days upon receipt of a grievance. The Regional Lands Officer, as the Project/GRC Liaison Officer, will also provide project information to stakeholders.

### **9.6.2 Grievance Redress Committee (GRC)**

A Grievance Redress Committee will be set up in Ho. The committee will receive, investigate and provide feedback on grievances that are beyond the Regional Lands Officer or when aggrieved persons are not satisfied with the feedback they receive from the Regional Lands Officer upon lodging a grievance with him.

The committee will be made up of:

- Ministry of Lands and Natural Resources
- A representative of the PIU;
- A representative of beneficiary Assembly;
- A representative of the Lands Commission;
- A representative of the Aggrieved Party; and
- A representative of Civil Society Coalition on Land in the Region

The functions of the grievance redress committee will be to receive, investigate and resolve issues with the Contractor. The aggrieved party or parties is/are required to channel their grievances to the GRC through any means including verbal narration, telephone calls, text messages and letters. The Committee will sit as and when complaints are lodged. The grievance redress process, at this level, shall follow the chain below in resolving grievances, including introducing any other initiatives that could compliment the effectiveness of the process:

- (i) Receive grievances (logging);
- (ii) Acknowledgement of grievances;
- (iii) Verification, investigation, negotiations, and actions;
- (iv) Monitoring and evaluation;
- (v) Provide Feedback to parties;
- (vi) Agreement secured, and
- (vii) Signing off.

Grievance will be received and transmitted on to an official form and the applicant will be duly notified within 3 days of lodging a complaint. If the grievance can be resolved by the Grievance Committee, corrective actions will be determined. After the case is evaluated and corrective action determined, the proposed solutions or corrective/preventive actions shall be discussed with the complainant together the timeframe for the implementation of the corrective/compensation measures. If the resolution of the grievance requires commitment beyond the Grievance Redress Committee, the members shall coordinate and consult with relevant authorities. The party responsible for implementing the corrective measures shall be recorded in the Grievance Closeout Form. Once an agreement has been reached between the applicant and the party responsible for the corrective actions, the applicant will be asked to sign off the grievance closeout form. If the applicant remains dissatisfied with the outcome, additional corrective action will be agreed on and carried out by the responsible party. The Grievance Redress Committee will have to address grievance it receives with 10 working days.

### **9.6.3 Lands Commission**

If aggrieved parties are not satisfied with the outcomes of the first two processes it may seek redress from Lands Commission Head Office in Accra through the Executive Secretary.

It is anticipated that the number of cases, which may need to be referred for redress, will be relatively small and that only the first and second tiers of the redress mechanism may need to be activated. The mediation process shall be confidential, transparent, and objective, as well as accountable, easy, fast, accurate and participatory. However, if the aggrieved party is not satisfied with the outcomes from the three tiers he/she/they have the right to go the law court at their own expense.

### **9.7 Grievance Redress Mechanisms for Workers on Site**

The proposal is to establish a hot line that aggrieved workers can call to register their grievances directly to the management level personal of the Construction Firm that will be implementing the works. This contact number must be advertised so that workers are aware of it and encourage to use it without being intimidated or targeted for negative feedback. Workers may also lodge their grievance through writing or verbally through the Environment, Social, Health and Safety Officer of the Contractor.

When an aggrieved party/parties is/are not satisfied with the outcome from management, he/she/they can precede to the law court. Similar processes and timelines for resolving community grievances are proposed for the workers' grievance system.

## 10. Decommissioning

When the construction of the Ho CSAU are completed, a decommissioning exercise would be carried out in such a way as to minimize negative impacts. It is envisaged that before any decommissioning starts, utility supply to all temporary structures, e.g. workshops and sheds would be disconnected. This would be followed with dismantling of these structures. The dismantled parts including wood pieces and sandcrete blocks will be arranged according to type and prepared for transportation to the Contractors workshop or sold to dealers for other civil works. The unwanted ones will be hauled to waste disposal site approved by the Ho Municipal Assembly. All equipment and machinery that are usable will be moved to a new project site or sent to a packing yard. Non-usable equipment and metals will be sold as scrap to the scrap dealers.

# 11. References

Environmental Protection Agency (1999). A Guide to Environmental Impact Assessment in Ghana. Accra: Environmental Protection Agency;

Government of Ghana (1994). Environmental Impact Agency Act, 1994 (Act 490). Accra: Government Printer.

Government of Ghana (1999). Environmental Impact Assessment Regulation, 1999 (L.I. 1652). Accra: Government Printer.

Ho Municipal Assembly (2014). Medium Term Development 2014 -2017. Ho: Ho Municipal Assembly.

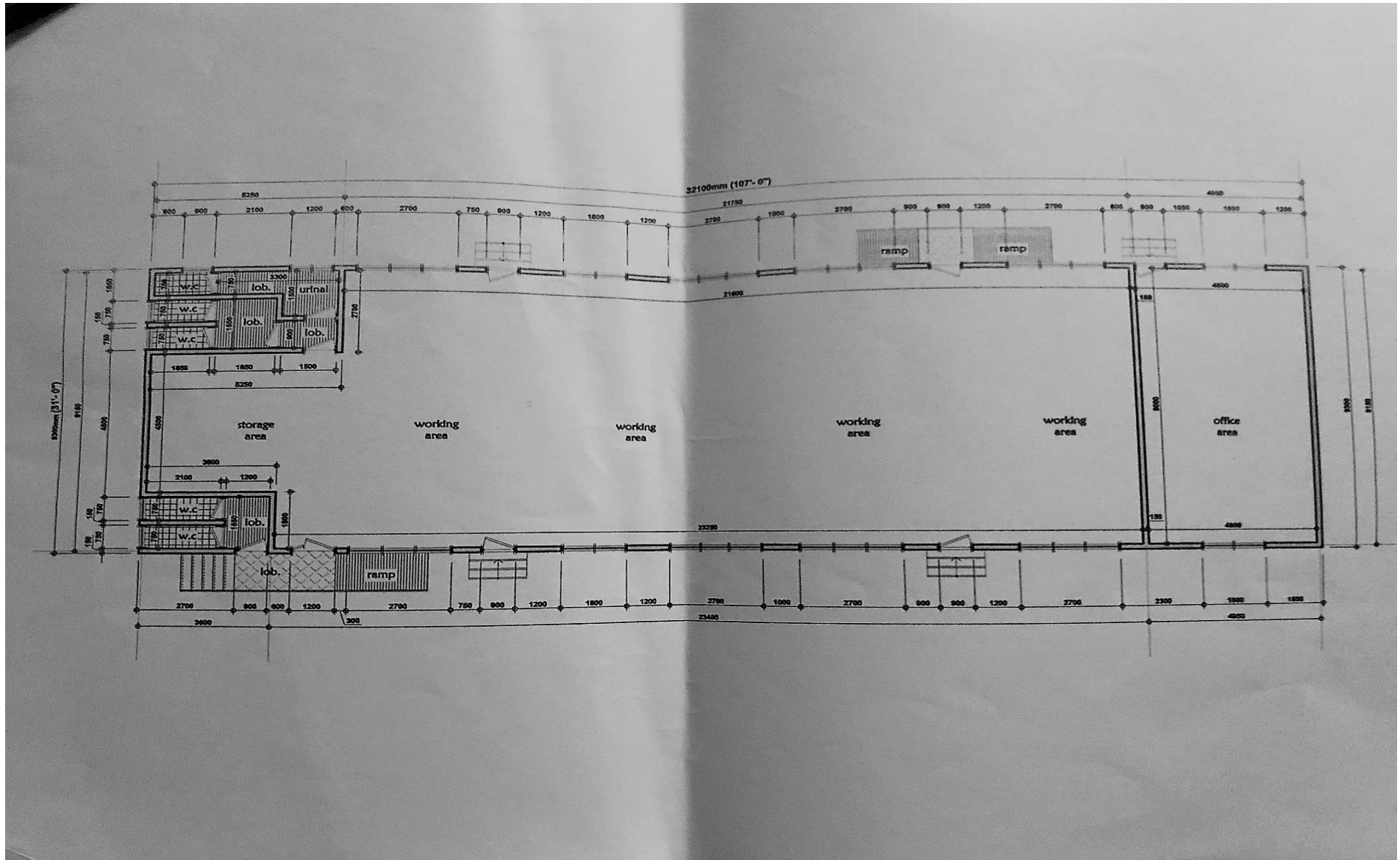
World Bank (2013). Operational Manual: OP. 4.01-Environmental Assessment. Washington DC: World Bank.

## Appendix A. Locational Map and Floor Plan of the CSAU in Ho

### A.1.1 Project Location Map (Ho Site)



### A.1.2 Typical Layout of the CSAU in Ho



## Appendix B. Pictures

Plate 1: Project Site



Plate 2: Exterior of a Typical CSAU



Plate 3: Interior of Typical CSAU



Plate 4: Site Visit- Ho



Plate 5: Site Visit- Area Occupied by Petty Traders



Plate 6: Site Visit- Ho



Plate 7: Consultation with Lands Commission Staff-Ho



Plate 8: Consultation with TCPD –Ho



Plate 9: Consultation with A Food Vendor on Site- Ho





## Appendix C. Consultation and Disclosure

### **Stakeholder Identification**

Stakeholder identification and consultation is an integral part of an Environmental and Social Assessment. Primary stakeholders are directly affected by the project impacts and outcomes, while secondary stakeholders are affected only indirectly. The Lands Commission and the Land Administration Project (PIU) are the primary stakeholders of this project, while the World Bank, traders on the site, Environmental Protection Agency and the Ministry of Lands and Natural Resources are the secondary stakeholders identified under this project. These stakeholders were identified based on review of safeguards reports for similar office assignments.

### **Stakeholders Consulted**

The stakeholders consulted were officials of the Lands Commission, Ho Municipal Assembly and the Environmental Protection Agency Office in Accra (see Appendix B: Plate 7 to 9 for consultations pictures and consultation sheets in **Error! Reference source not found.C** for Consultation sheets).

### **Consultation Process and Channels Used**

The consultation process involved arranged meetings with stakeholders and site inspections as well as official letters.

### **Consultation Matrix**

The matrix of decisions taken during the stakeholder' consultation as well as issues discussed, meeting attendance and date of consultation are captured in Table 9 (see Plate 7 to 9 **Error! Reference source not found.B** for pictures of consultations and **Error! Reference source not found.C** for Consultation Sheets). During stakeholder consultations, the major issues raised by stakeholders in Ho were the provision of structural drawings to the Spatial Planning Unit of the Ho Municipal assembly for review before construction begins.

**Table 10: Consultation Matrix**

Stakeholder	Date of Consultation	*Attendance/ No. of Officials/Persons Consulted	Channel of Consultation	Issues Consulted On	Conclusions Arrived at
<b>Environmental Protection Agency</b>	15 <sup>th</sup> August, 2018	1	<ul style="list-style-type: none"> <li>Properly arranged meeting</li> </ul>	<ul style="list-style-type: none"> <li>Noise and Dust pollution</li> <li>Land ownership</li> <li>Environmental Permit has expired</li> <li>Provision of adequate compensation for affected persons</li> </ul>	<ul style="list-style-type: none"> <li>Materials to site should be brought to site off peak hours</li> <li>Project site should be hoarded</li> <li>Project should be registered</li> </ul>
<b>Lands Commission</b>	20 <sup>th</sup> August 2018	1	<ul style="list-style-type: none"> <li>Properly arranged meetings</li> </ul>	<ul style="list-style-type: none"> <li>Project Brief</li> <li>Impacts of Project</li> <li>Mitigation measures</li> <li>Provision of additional washrooms to cater for clients</li> </ul>	<ul style="list-style-type: none"> <li>Maximum cooperation from management to ensure success of project</li> <li>Digging should be done on weekends</li> <li>Project should be completed on time</li> </ul>
<b>Land use and Spatial Planning Unit</b>	20 <sup>th</sup> August 2018	1	<ul style="list-style-type: none"> <li>Properly arranged meeting</li> </ul>	<ul style="list-style-type: none"> <li>Briefing on the project and the likely environmental and social impacts</li> <li>Structural drawing for the construction</li> <li>Project conforms with the zoning status (Civic)</li> </ul>	<ul style="list-style-type: none"> <li>Structural drawings must be submitted for vetting and approval by the spatial planning committee</li> </ul>
<b>Petty Traders at the Site</b>	20 <sup>th</sup> August 2018	4	<ul style="list-style-type: none"> <li>Individual Meetings</li> </ul>	<ul style="list-style-type: none"> <li>Information about the project and project impacts</li> <li>Contractor's workers not paying for goods they purchase from local traders on credit</li> <li>Do not foresee the project impacting them</li> </ul>	<ul style="list-style-type: none"> <li>Construction zone will be hoarded</li> <li>Will boost their sales</li> <li>Traders will not be displaced by the project</li> </ul>

Consultation and Disclosure of the ESIA Report

The LAP 2 PIU will disclose the ESIA once it is approved by the project and cleared by the World Bank. Hard copies of the ESIA shall also be placed in the Head and Regional Office of the Lands Commission as well as the Ho Municipal Assembly for public viewing throughout the construction phase of the project. The World Bank will disclose the ESIA at the World Bank's External Website.

MINISTRY OF LANDS AND NATURAL RESOURCES- LAND ADMINISTRATION PROJECT II ADDITIONAL FINANCING (LAP 2-AF) CONSULTANCY FOR ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) AND ABBREVIATED RESETTLEMENT ACTION PLAN (ARAP)

Name of Organization: Spatial Planning Committee - Ho Municipal Assembly  
 Date of Consultation: 20-08-18 Time: 2:00pm Interviewer(s): Dr. Emmanuel Abeka

NAME OF CONSUTEE(S)	POSITION	CONTACT NUMBER
<u>Sitsofe Dzo</u>	<u>MUNICIPAL PHYSICAL PLANNING OFFICER</u>	<u>020-9387107</u> <u>fredzo1@gmail.com</u>

ISSUES DISCUSSED	CONCERNS	RECOMMENDATIONS/ CONCLUSIONS
<ul style="list-style-type: none"> <li>* Project Brief</li> <li>* What are the requirements of the project must undergo for the project to be a success.</li> <li>* What are their concerns</li> <li>* Impacts of Project</li> <li>* What are the mitigation measures the project must</li> </ul>	<ul style="list-style-type: none"> <li>- The project sit conforms with the zoning status (line).</li> <li>- <del>ARAP</del></li> </ul>	<ul style="list-style-type: none"> <li>- A copy of the drawings must be submitted to the Assembly to be vetted</li> </ul>

NAME: SITSOFE DZO SIGNATURE: [Signature] DATE: 20-08-2018

MUNICIPAL PHYSICAL  
 PLANNING OFFICER  
 HC MUN. ASSEMBLY

MINISTRY OF LANDS AND NATURAL RESOURCES- LAND ADMINISTRATION PROJECT II ADDITIONAL FINANCING (LAP 2-AF) CONSULTANCY FOR ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) AND ABBREVIATED RESETTLEMENT ACTION PLAN (ARAP)

Name of Organization: Spatial Planning Committee - Ho Municipal Assembly

Date of Consultation: 20-08-18 Time: 2:00pm Interviewer(s): Dr. Emmanuel Akoka

NAME OF CONSUTEE(S)	POSITION	CONTACT NUMBER
<u>Sitsofe Dzo</u>	<u>MUNICIPAL PHYSICAL PLANNING OFFICER</u>	<u>020-9387107 fredzoll@gmail.com</u>

ISSUES DISCUSSED	CONCERNS	RECOMMENDATIONS/ CONCLUSIONS
<ul style="list-style-type: none"> <li>* Project Brief</li> <li>* What are the requirements of the project must undergo for the project to be a success.</li> <li>* What are their concerns</li> <li>* Impacts of Project</li> <li>* What are the mitigation measures the project must</li> </ul>	<ul style="list-style-type: none"> <li>- The project sit conforms with the zoning status (line).</li> <li>- <del>ARAP</del></li> </ul>	<ul style="list-style-type: none"> <li>- A copy of the drawings must be submitted to the Assembly.</li> <li>- be vetted</li> </ul>

NAME: SITSOFE DZO SIGNATURE: [Signature] DATE: 20-08-2018

MUNICIPAL PHYSICAL PLANNING OFFICER  
HC MUN. ASSEMBLY

MINISTRY OF LANDS AND NATURAL RESOURCES- LAND ADMINISTRATION PROJECT II ADDITIONAL FINANCING (LAP 2-AF) CONSULTANCY FOR ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) AND ABBREVIATED RESETTLEMENT ACTION PLAN (ARAP)

Name of Organization: Lands Commission - Ho (PULMB)  
 Date of Consultation: 20/08/2018 Time: 1:00 pm Interviewer(s): Dr. Emmanuel Abeka

NAME OF CONSUTEE(S)	POSITION	CONTACT NUMBER
<u>MARK GUBU</u>	<u>SENIOR LAND ADMINISTRATION OFFICER</u>	<u>0244976582</u>
<u>EMMANUEL ATISOGBU</u>	<u>LAND ADMINISTRATION OFFICER</u>	<u>0542511043</u>

ISSUES DISCUSSED	CONCERNS	RECOMMENDATIONS/ CONCLUSIONS
<ul style="list-style-type: none"> <li>- Project Brief.</li> <li>- What are some of the impacts the office perceive</li> <li>- Mitigation Measure.</li> <li>- Any other issue of concern they foresee.</li> </ul>	<ul style="list-style-type: none"> <li>* Low Based on the size of the construction the office does not perceive any major impacts.</li> <li>* Noise and dust should be minimal</li> </ul>	<ul style="list-style-type: none"> <li>Project should be started as soon as possible.</li> <li>Works should be completed on time</li> </ul>

NAME: MARK GUBU SIGNATURE: [Signature] DATE: 20/08/2018

ASSISTANT LANDS OFFICER  
 LANDS COMMISSION SGT.  
 HO

## Appendix D. Environmental and Social Clauses

In order to ensure the proposed mitigation measures are implemented by the Contractor as well as other responsible parties, the following Contractual Clauses are to be inserted into the Works Contract for the Contractors executing the works:

### General

1. In addition to these general conditions, the Contractor shall comply with any specific Environmental and Social Management Plan (ESMP) for the works for which he/she is responsible. The Contractor shall inform himself about such an ESMP, and prepare his work strategy and plan to fully incorporate relevant provisions of that ESMP. If the Contractor fails to implement the approved ESMP after written instruction by the Supervising Consultant (SC) of the Project Consultant to fulfil his obligation within the requested time, the client reserves the right to arrange through the SE for execution of the missing action by a third party on account of the Contractor.
2. Notwithstanding the Contractor's obligation under the above clause, the Contractor shall implement all measures necessary to avoid undesirable adverse environmental and social impacts wherever possible, restore work site/areas to acceptable standards, and abide by any environmental performance requirements specified in the project ESMP. In general, these measures shall include but not be limited to:
  - *Ensure that noise levels emanating from machinery, vehicles, and noisy construction activities (e.g. excavation) are kept at a minimum for the safety, health, and protection of workers within the vicinity of high noise levels and nearby communities.*
  - *Ensure that garbage, sanitation and drinking water facilities are provided for construction workers.*
  - *Ensure that, in as much as possible, local materials are used to avoid importation of foreign material and long-distance transportation.*
  - *Ensure public safety for the operation of work to avoid accidents.*
  - *Ensure contractor workers do not involve themselves in illicit sexual activities with the girls or women in the project communities.*
3. The Contractor shall prepare an ESMP based on the Project ESMP for review and approval of the LAP 2-PIU before the commencement of works
4. The Contractor shall prepare a Code of Conduct for all his employees and third party suppliers on the project for review and approval by LAP 2 PIU before the commencement of works
5. The Contractor shall explain the content of the approved Code of Conduct to the employees and third party suppliers and then sign it off with them individually before the commencement of work
6. Site clearing shall not be undertaken unless authorised by the SE.
7. The Contractor shall indicate the period within which he/she shall maintain status on site after completion of civil works to ensure that significant adverse impacts arising from such works have been appropriately addressed.
8. The Contractor shall adhere to the proposed activity implementation schedule and the monitoring plan/strategy to ensure effective feedback of monitoring information to project management so that impact management can be implemented properly, and if necessary, adapt to changing and unforeseen conditions.
9. Besides the regular inspection of the site by the SC for adherence to the contract conditions and specifications, the client may appoint an individual independent environmental and social expert to oversee the compliance with these environmental conditions and any proposed mitigation measures. State environmental authorities may carry out similar inspection duties. In all cases, as directed by the SC, the Contractor shall comply with directives from such as inspection to implement measures required

to ensure the adequacy of rehabilitation measures carried out on the biophysical environment and compensation for socio-economic disruption resulting from implementation of any works.

### **Material Sources**

10. The Contractor shall use sand, wood and aggregates only from suppliers/sources certified by Ghana Environmental Protection Agency, with a valid environmental permit to operate the material source/activity.
11. Any tree felled on site shall be replaced fourfold and nurture for at least six months

### **Water Resources Management**

12. No construction material containing spoils or site effluent, especially cement and oil, shall be allowed to flow into natural water drainage courses.
13. Wash water from washing equipment shall not be discharged into road drains
14. Site spoils and temporary stockpiles shall be located away from the drainage system and surface run off shall be directed away from stockpiles to prevent erosion.

### **Disposal of Unusable Elements**

15. Unusable materials and construction elements such as electro-mechanical equipment, pipes, accessories and demolished structures will be disposed of in a manner approved by the EPA and supervised by the SC of the project consultant. The Contractor has to agree with the SE which elements are to be surrendered to the Client's premises, which will be recycled or reused, and which will be disposed of at approved landfill site.
16. Unsuitable and demolished elements shall be dismantled to a size fitting on ordinary trucks for transport.
17. Left over materials will be collected and used for other purposes.

### **Health and Safety**

18. In advance of the construction work, the Contractor shall mount an awareness and hygiene campaign. Workers and local residents shall be sensitized on health risks particularly of AIDS.
19. Adequate directional, prohibitory signs to workers and visitors of construction activities, alternative exits etc shall be provided at appropriate points.
20. Construction vehicles shall not exceed maximum speed limit of 20km per hour.
21. Site workers must undergo medical screening before they are employed
22. Enforce a policy of No-PPEs No Site Entering

### **Illicit Sexual Affairs, HIV/AIDs and STI Awareness.**

23. Contractors shall clearly state in their contracts with employees and third-party suppliers that they do not condone rape, defilement, and illicit sexual behaviour - together with sanctions for breaching these provisions.
24. Environmental, Social, Health and Safety Officer of the Contractor shall report any incidence of rape, defilement or other illicit sexual affairs to the SE and the nearest police station.
25. The Contractor shall prepare a Code of Conduct, explain the content to workers in a language they understand and have them sign up to the document

### **HSE Reporting**

26. The Contractor shall prepare monthly progress reports to the SE on compliance with these general conditions, the project EMP if any, and his own EHS-MP. An example format for a Contractor HSE report is given below. It is expected that the Contractor's reports will include information on:
  - HSE management actions/measures taken, including approvals sought from local or national authorities;
  - Problems encountered in relation to HSE aspects (incidents, including delays, cost consequences, etc. as a result thereof)
  - Changes of assumptions, conditions, measures, designs, and actual works in relation to HSE aspects; and



- Observations, concerns raised and/or decisions taken with regard to HSE management during site meetings
27. It is advisable that reporting of significant HSE incidents be done “as soon as practicable”. Such incident reporting shall therefore be done individually. Also, it is advisable that the Contractor keeps his own records on health, safety and welfare of persons, and damage to property. It is advisable to include such records, as well as copies of incident reports, as appendixes to the bi-weekly reports. An Example formats for an incident notification and detailed report are given below. Details of HSE performance will be reported to the Client through the SE’s reports to the Client.

### **Labour Relations**

28. The contractor shall not employ minors (below 18 years) as part of his casual or permanent employees
29. The contractor shall not engage in forced labour of kind including forcing employees to work on statutory holidays
30. The contractor shall not procure goods or services from third party suppliers that engage child or forced labour
31. The contractor in his recruitment shall not discriminate by gender, religion and ethnicity.
32. The contractor shall set up a fair and transparent work-based grievance redress system headed by a management member and protect aggrieved employees against discrimination and persecution.

### **Training of Contractor's Personnel**

33. The Contractor shall provide sufficient training to his own personnel to ensure that they are all aware of the relevant aspects of these general conditions, any project ESMP and are able to fulfil their expected roles and functions. Specific training should be provided to those employees that have particular responsibilities associated with the implementation of the EHS-MP. General-topics should be:
- HSE in general (working procedures);
  - Emergency procedures; and
  - Social and cultural aspects (awareness creation on social issues).

### **Cost of Compliance**

34. It is expected that compliance with these conditions is already part of standard good workmanship and state of art as generally required under this Contract. The item “Compliance with Environmental Management Conditions” in the Bill of Quantities covers these costs. No other payments will be made to the Contractor for compliance with any request to avoid and/or mitigate an avoidable HSE impact.

### **Sanction**

35. In application of the contractual agreements, the lack of respect of the environmental and social clauses, duly observed by the consultant, could be a justification for termination of the contract.

## Appendix E. Sample Guideline for Preparing a Code of Conduct

A satisfactory bidder's code of conduct shall 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 particular concerns of the region, the community and the project. The issues to be addressed include:

1. Compliance with applicable laws, rules, and regulations of Ghana and applicable World Bank Policies;
2. 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);
3. The use of illegal substances;
4. Non-Discrimination (for example on the basis of family status, ethnicity, race, gender, religion, language, marital status, birth, age, disability, or political conviction);
5. Interactions with community members (for example to convey an attitude of respect and non-discrimination);
6. 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);
7. 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);
8. Protection of children (including prohibitions against abuse, defilement, or otherwise unacceptable behavior with children, limiting interactions with children, and ensuring their safety in project areas);
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;
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 plain language and signed by each worker (both permanent and temporary) to indicate that they have:**

1. Received a copy of the code;
2. Had the code explained to them;
3. Acknowledged that adherence to this Code of Conduct is a condition of employment, and
4. Understood that violations of the Code can result in serious consequences, up to and including dismissal, or referral to legal authorities.