Kingdom of Cambodia

Nation Religion King

Ministry of Land Management, Urban Planning and Construction (MLMUPC)

Ministry of Agriculture, Forestry and Fisheries (MAFF)

LAND ALLOCATION FOR SOCIAL AND ECONOMIC DEVELOPMENT

PROJECT III (LASED III)

Environmental and Social Management Plan (ESMP) for Development Support to Six SLCs for Clean Water Supply System (CWSS)

ESMP-Cluster 4: (a). Prasnoeb SLC, Rolea B'ier district, Kampong Chhnang province, (b). Koul SLC, Prasat Sambour district, Kampong Thom province (c). Tumring SLC, Sandan district, Kampong Thom province (d). Samkhuoy, Pluk, and Srae Kor SLC, Sesan district, Stueng Traeng province.

"Clean water supply system subproject, including construction of boreholes, excavation of a raw water ponds, water pipelines, water treatment plan, water tower, clean water distribution pipelines, operation office, and installation of electrical and solar systems."

November 25, 2025 (Final)

Table of Contents

List of Tables:

List of Figures:

List of Abbreviations and Acronyms

CC	Commune Council
CDF	Community Development Facilitator
CESMP	Contraction Environmental and Social Management Plan
CHS	Community, Health, and Safety
CIP	Commune Investment Plan
CWSS	Clean Water Supply System
DWG	District Working Group
ERW	Explosive Remnants of War
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESHS	Environmental, Social, Health and Safety
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Safeguards
FGD	Focus Group Discussion
GBV/SEA/SH	Gender-Based Violence/ Sexual Exploitation and Abuse/ Sexual Harassment
GRM	Grievance Redress Mechanism
GRMC	Grievance Redress Mechanism Committee
LMP	Labor Management Plan
LUP	Land Use Planning
LWC	labor and working conditions
MAFF	Ministry of Agriculture, Forestry and Fisheries
MLMUPC	Ministry of Land Management, Urban Planning, and Construction
NGO	Non-Government Organization
OHS	Occupation, Health, and Safety
PDAFF	Provincial Department of Agriculture, Forestry and Fisheries
PDLMUCC	Provincial Department of Land Management, Urban Planning, Construction, and Cadastral
PDRD	Provincial Department of Rural Development
PDWA	Provincial Department of Women Affairs
PDWRAM	Provincial Department of Water Resources and Methodology
PGRC	Provincial Grievance Redress Committee

PIU	Project Implementation Unit
PLUAC	Provincial Land Use and Allocation Committee
PMU	Project Management Unit
PPE	Personal Protective Equipment
SEP	Stakeholder Engagement Plan
SLC	Social Land Concession
STD	Sexually transmitted diseases
TLR	Target Land Recipient
VAC	Voilen Against Children
WB	The World Bank

1. Introduction

1. Cambodia Land Allocation for Social and Economic Development – III (LASED III) aims to continue supporting the Royal Government of Cambodia's (RGC) Commune Social Land Concession (SLC) program and the RGC's Indigenous Community Land Titling (ICLT) program, in both cases through land titling as well as infrastructure and livelihoods activities. The project Development Objective (PDO) is to provide access to land tenure security, agricultural and social services, and selected infrastructure to small farmers and communities in the project areas. The executing agency for the project will be Ministry of Land Management, Urban Planning and Construction (MLMUPC) and the implementing agencies are Ministry of Agriculture, Forests and Fisheries (MAFF) and Provincial project teams.

2. There are 10 target Social Land Concession (SLC) sites for the LASED III project, all of which are progressing according to the communal SLC program process. All ten site-specific environmental and social management plans (ESMPs) have been fully prepared, reviewed, and formally approved, ensuring compliance with the project environmental and social framework and guiding the risk mitigation measures in the SLC process and infrastructure development supports (except for the subproject of the clean water supply system).

3. Furthermore, the proposed sub-projects of the clean water supply system (CWSS) support the suitability/availability of each SLC site through the feasibility study and assessment of those ten target SLC sites. The study has identified the suitable sites, including (a). Prasnoeb SLC, Rolea B'ier district, Kampong Chhnang province, (b). Koul SLC, Prasat Sambour district, Kampong Thom province, (c). Tumring SLC, Sandan district, Kampong Thom province, (d). Samkhuoy, Pluk, and Srae Ko SLC, Sesan district, Stueng Traeng province.

4. These six identified SLC sites have been clustered together for the preparation of an additional ESMP specifically addressing the CWSS sub-projects. This cluster ESMP will ensure that environmental and social safeguards are fully integrated into the design, construction, and operation phases of the clean water supply systems, thereby contributing to improved living conditions, enhanced community resilience, and sustainable development outcomes across the selected SLC sites.

5. Conversely, four SLC sites—Preah Phos, Paoy Char, Pongro, and Kbal Damrei—were assessed as unsuitable for supporting a large-scale CWSS due to site-specific technical and hydrological constraints. To ensure equitable access to clean water, these sites are instead being supported through the installation of drilled or pumped wells, with one pumped well provided for every fifteen households. This approach ensures that even in locations not suitable for centralized CWSS infrastructure, beneficiary households can still access reliable sources of safe drinking water, thereby maintaining consistency with the project's commitment to improving basic living standards and promoting social inclusion across all ten SLC sites.

6. The objective of the Environmental and Social Management Plan (ESMP) identify risks and impacts associated with the project as well as outline the avoidance mitigation and monitoring measures to apply during the sub-projects' implementation. For LASED III, all of World Bank's ESS1 – ESS10 apply except ESS9 (Financial Intermediaries). This Environmental and Social Management Plan (ESMP) is prepared to manage the E&S risks and impacts for the subproject of the clean water supply system in all of these six SLC sites as mentioned in paragraph 3 above.

7. The methodology and approach for the preparation of the ESMP complies with the World Bank Environmental and Social Framework (ESF) requirements as well as the Royal Government of Cambodia (RGC) legal requirements for environmental and social (E&S) risk management, such as the Land Law (2001) and subsidiary legislation including the frameworks

for SLC and ICLT, the Labor Law (1997); the Environment & Natural Resources Code (ENR Code, 2023); The Forest Law (2002) and the Law on Protection of National Cultural Heritage (1996). The details of legal gap analysis are outlined in the revised ESMF and published in March 2025. The methodology used are as follows:

- ***Literature Review.*** Relevant national and local environmental, social, land, and building laws and policies were reviewed together with the administrative structures. Other documents were reviewed as part of preparing this report, such as ESF documents.
- ***Review of Design Drawings.*** The preliminary architectural drawings were reviewed to apply the mitigation hierarchy, meet the requirements of the conditions of the subproject location.
- ***Stakeholders Consultations***. The project held meetings with the stakeholders and disseminated relevant project documents at the national, provincial, district, and village levels. The stakeholders' consultations also elicited their inputs as part of the project design and other issues of concern. Issues discussed, recommendations, and conclusions from the stakeholder engagement process are presented in Section 2 of this ESMP.
- ***Site Visits and Observations.*** Field visits to the proposed project sites to observe baseline conditions and the socio-economic activities around the project area of influence in section 1.2.
- ***Preparation of ESMP.*** The findings and conclusions from the literature review, design drawings, stakeholder consultations, and site visits/observations have been synthesized into this report, which are supported by appropriate pictures, maps and drawings.

1.1. Location/Site Description

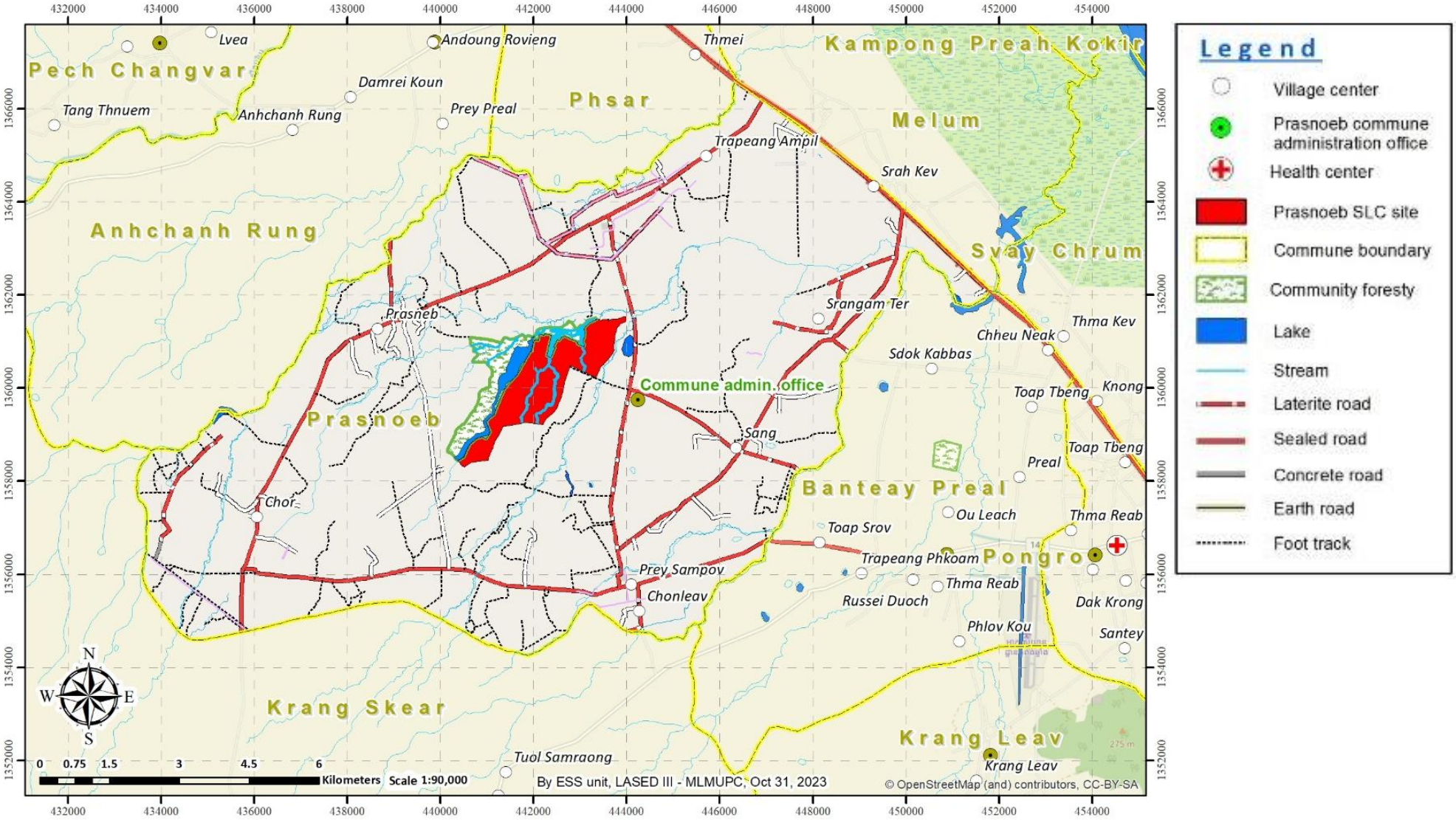
8. Prasnoeb SLC is located in Prasnoeb commune, Rolea B'ier district, Kampong Chhnang province. Prasnoeb borders by the east with Banteay Preal commune (Rolea B'ier district), by the west with Anchanh Rung commune (Baribour district), and by the north with three communes (Anchanh Rung, Melum, and Phsar Baribour district) and approximately 12 km from the national road #6, by the south with Kraing Skear commune (Toek Phos district). The area of this proposed SLC site was reclassified from the degraded forest of forest cover in 2002 to private state land for social land concession implementation.

9. Prasnoeb commune's clean water supply primarily comes from ring wells, hand pump wells, rainwater, and water filtration systems. Overall, 96.2% of households use clean water, while the remaining households rely on ponds, rivers, or streams. The commune has 660 pump or mixed wells, 598 excavated wells, and six ponds (Commune Socio-Economic Situation, 2022).

10. Within the boundary of this proposed SLC site, three stream networks have been identified: Chrolong San Stream (1,435m), Peam Chrong Stream (3,388m), and Trapeang Srahnae Stream (1,921m). In addition, two streams are located near the site boundary: Pkar Krasaing Stream (920m) and Spean Louk Stream (955m).

11. A total of 249 land recipient households were selected through SLC selection in accordance with the land use planning for residential and agricultural plots, as approved on September 20, 2023, by the Kampong Chhnang Provincial Land Use and Allocation Committee (PLUAC).

Figure 1: Geographical Map – Prasnoeb SLC



1.1.2 Koul and Tumring SLC, Kampong Thom Province

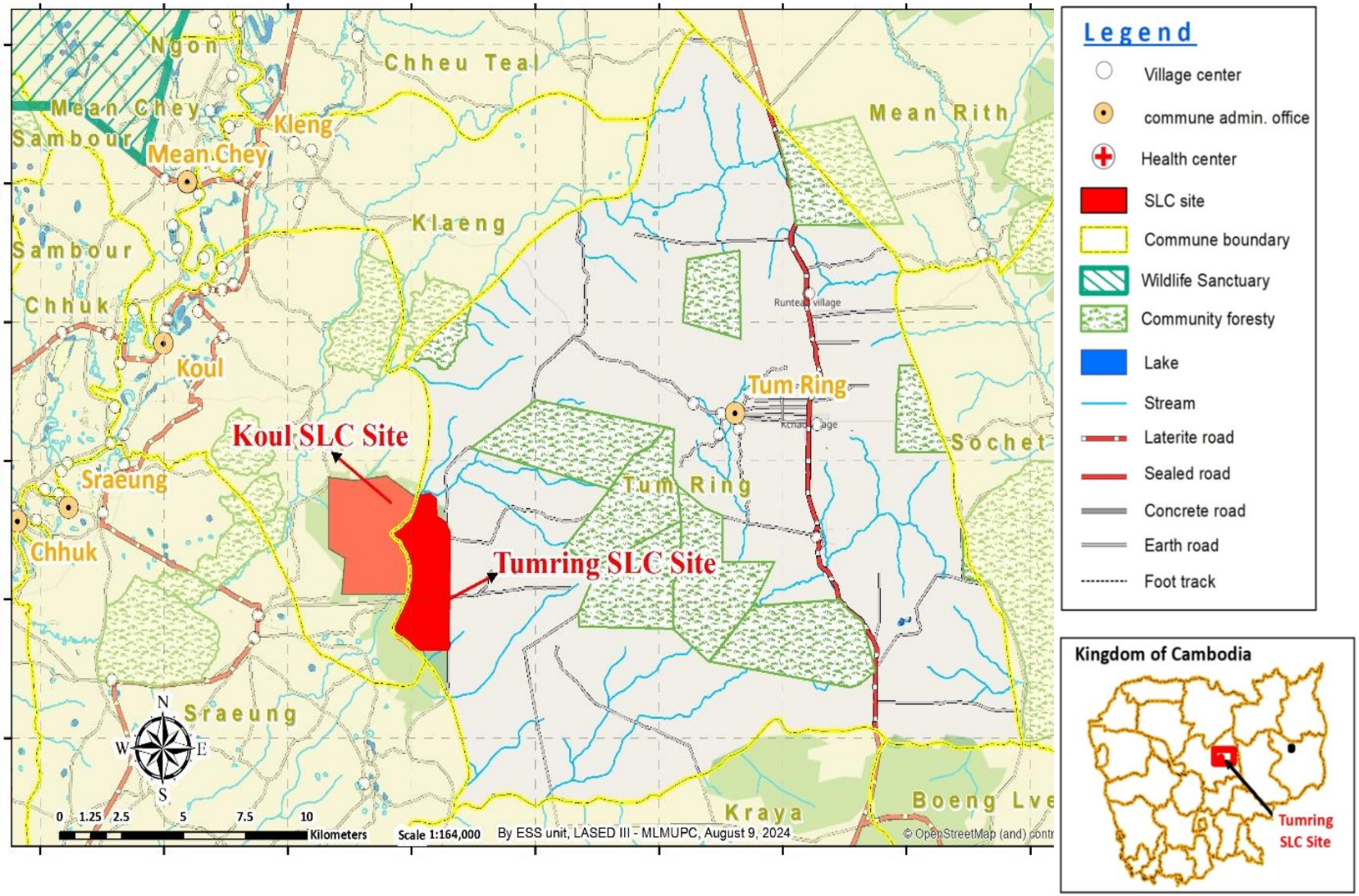
12. Koul SLC site is situated in Koul Commune, Prasat Sambour District, Kampong Thom Province, while the Tumring SLC site is located in Tumring Commune, Sandan District, also within Kampong Thom Province. These two SLC sites share a contiguous boundary, creating a direct geographical link between them. This proximity highlights the importance of coordinated planning and management to ensure consistent development interventions and to optimize resources across both sites.

13. In Koul commune, households access clean water mainly from taps, ring or hand-dug wells, drilled wells with handpumps, and rainwater harvesting tanks. However, only 15.0% of households have access to clean water, while the rest rely on other sources. The commune has 314 pumps or combined wells, 51 protected dug wells, 114 unprotected dug wells, and one pond (Commune Socio-Economic Situation, 2022). In contrast, Tumring commune has a much higher rate of clean water access, with 91.62% of households using taps, water filters, drilled wells, combined wells, hand-dug wells, and rainwater harvesting tanks. The remaining households rely on other sources. The commune has 104 pumps or combined wells, 505 protected dug wells, 303 unprotected wells, and one pond (Commune Socio-Economic Situation, 2022). To support these two new SLC communities, clean and safe water will be supplied through a clean water supply system.

14. A natural stream, known as the Ou Touch, runs for approximately 1.5 to 2.0 km through both the Koul and Tumring SLC sites. The stream carries water year-round and has been identified as a potential surface water source to support the clean water supply system in these two SLC sites.

15. A total of 813 land recipient households were selected through the SLC process, including 437 households in Koul and 376 households in Tumring. The selection was carried out in line with the land use plan for residential and agricultural plots, as approved by the Kampong Thom Provincial Land Use and Allocation Committee (PLUAC).

Figure 2: Geographical Map – Koul and Tumring SLC, Kampong Thom Province



1.1.3 Samkhuoy, Phluk, and Srae Kor SLC, Stung Treng Province

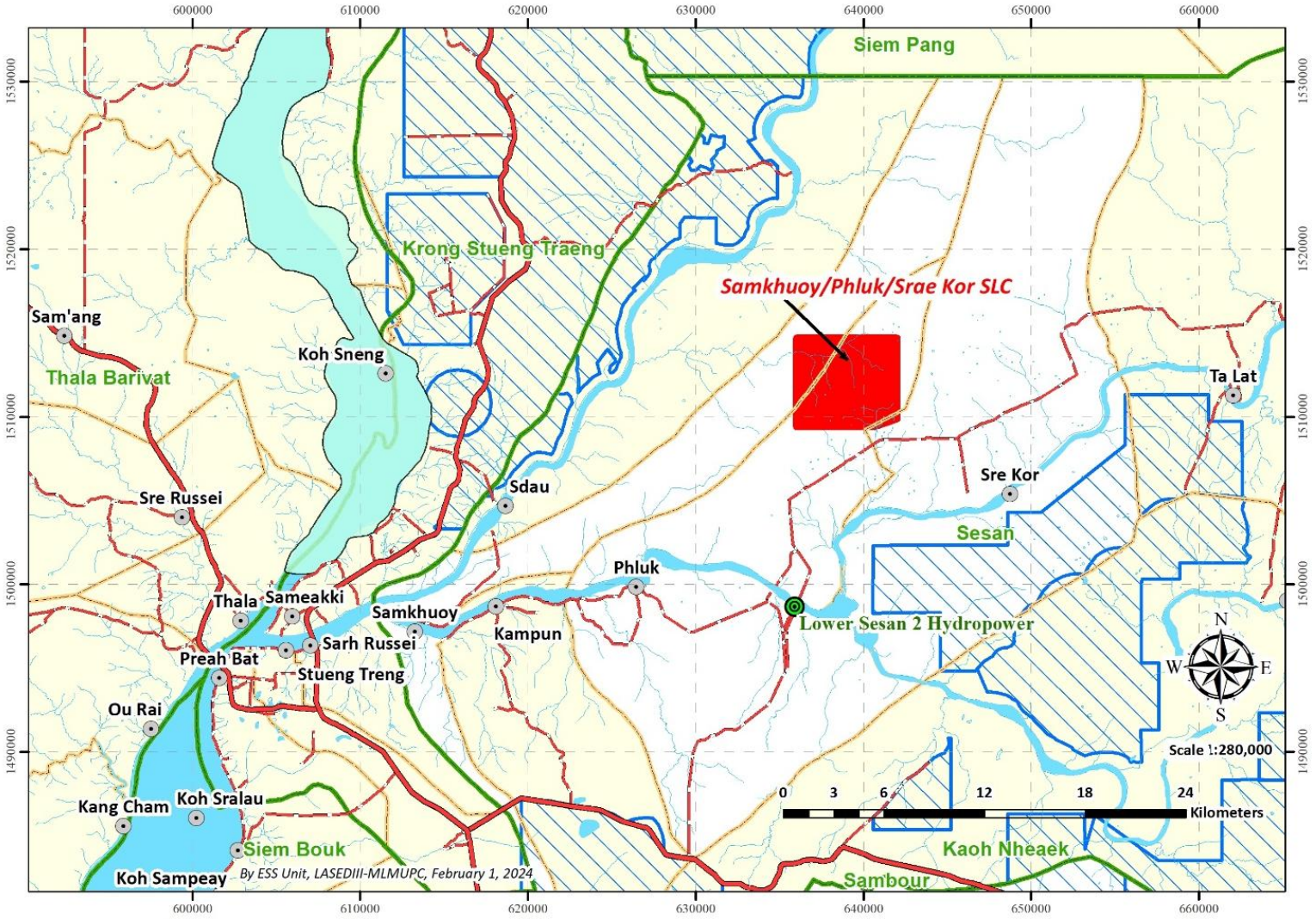
16. These SLC sites share borders with three communes, Samkhuoy, Phluk, and Srae Kor in Sesan district, Stung Treng province (Figure 2, communes and SLC Map). These sites are in the East part of Stung Treng provincial town with approximately 50-60 km away. The SLC site is around 14-20 km from the center of Samkhuoy and Phluk communes and just 3 km from Srae Kor commune administration office.

17. These three SLC sites also share a contiguous boundary, creating a direct geographical link between them. This proximity highlights the importance of coordinated planning and management to ensure consistent development interventions and to optimize resources across three sites.

18. The Sesan River has been identified as a potential surface water source to support the clean water supply system in these three SLC sites, Samkhuoy, Phluk, and Srae Kor.

19. A total of 634 land recipient households were selected through the SLC process, including 226 households in Samkhuoy, 227 households in Phluk, and 181 households in Srae Kor. The selection was carried out in line with the land use plan for residential and agricultural plots, as approved by the Kampong Thom Provincial Land Use and Allocation Committee (PLUAC).

Figure 3: Geographical Map – Samkhuoy, Pluk, and Srae Kor SLC, Stueng Traeng Province



1.2. Scope and Activities

20. The MLMUPC and MAFF team have developed this site-specific ESMP, which incorporates various environmental and social risk screening. This ESMP has covered all the risks and mitigation measures from the proposed livelihood support activities and the development of community infrastructures.

21. Then, under the LASED III financial support of the infrastructure development, the contractor who wins the bid will be responsible for producing the contractor's environmental and social management plan (C-ESMP) before commencing the construction (Section 7).

22. Below is the summary of the proposed subproject development support.

Table 1: The summary table of the Proposed Subproject of Clean Water Supply System

Nº	Site	Drilled Well (Borehole)	Excavated Pond	Water Treatment Plant	Water Tower	Water Distribution Pipeline	Operation office	Installation of Solar System	Remarks
1	Prasnoeb	2	0	10m x 15m	5.4m x 5.4m x 15m	9,951m	6m x 6m	Yes	
2	Samkhuoy, Phluk, and Srae Kor	0	5,177sqm with 7m depth *(connected with the Sesan River)*	10m x 15m	5.4m x 5.4m x 15m	29,590m	6m x 6m	Yes	
3	Koul and Tumring	0	1,440sqm with 7m depth *(connected with the natural stream)*	10m x 15m	5.4m x 5.4m x 15m	18,950m	6m x 6m	Yes	

2. Stakeholder Engagement

23. All key stakeholders are engaged for the whole assessment and E&S screening for the clean water supply system subproject, which includes. They include local stakeholders from the beneficiary community, and the national and sub-national government entities involved in implementing LASED III at the community level (stakeholder engagement during the planning and implementation of the SLC program and the development of supporting activities).

2.1. Stakeholders

24. Identifying stakeholder engagement is a step that ensures who the stakeholders are, how they influence or are affected by the project, and how to engage with them effectively. The stakeholder engagement during the planning and implementation of development support activities is explained in Table below, including local stakeholders from national (National LASED Project team), or sub-national government entities such as the Provincial Department of Environment, the Provincial Department of Rural Development (PDRD), District Working Group (DWG), Commune Council (CC) involved in the implementation of LASED III at the community level and the SLC's beneficiary.

25. The Participatory rural appraisal was used during the stakeholder engagement /consultation to identify the community's needs, such as a key informant interview, focus group discussion, transect walk, checklist, and community resources mapping. The focus group discussion consists of target land recipients and commoners to ensure the representation of the whole community.

26. Subsequently, LASED III and firm under LASED III coordinated the technical survey[1] to determine the existing conditions, which have been conducted by LASED III and Firm under LASED III's engineer and the relevant departments including the ES risk and impact screening/consultation (the ES screening report and attendant list are in the footnote[2]) with all stakeholders (see table below for more details).

[1] This subproject is a small building and normally built at a higher location in line with climate change, so a technical study is required.

[2] The ES risk and impact screening report and attendant list can be found in the link below:

Table 2: Stakeholders Engagement

Type of Stakeholder	Stakeholder interest or role in project planning, implementation, and outcomes	Number of People	Language, Literacy, and Internet Use	Means of Communication / Specific Needs in the Consultation Process

Community
LASED III-MLMUPC
	• Community outreach identifies the community's priority needs.
	• Community consultation to propose and finalize the priority needs of development support.
	• Lead the consultation and development of the following:
	  ○ Infrastructure Need Assessment
	  ○ Community/Village Profile
	  ○ Sub-project E&S Risk and Impact Screening and ESMP.
	  ○ Proposed subprojects of clean water supply system observation.
		Approx.
		50
			Khmer
			Physical/in-person meeting
				• In-person, Phone, Telegram
				• Ensure that the SEP provisions are implemented for all outreach activities.
				• Ensure broader community and local authority support.
				• FGD, community broad meeting
				• Identify with the needs of basic infrastructure development.
				• Undertake E&S Risk and Impact screening and ESMP consultation with the mitigation measures.
				• Lead the technical survey for the proposed construction in each SLC sites.

PDLMUCC	• Sub-national Project Executive Agency • Coordination between the project's partner for physical study, planning, monitoring and reporting. • Monitoring and Reporting • GRM Implementation for sub-project contract	30	Khmer Physical/in-person meeting.	• In-person, Phone, Telegram • Topographical survey for the construction of CWSS • Monitoring and reporting the sub-project contract implementation. • Reporting of GRM Complaints
PDWRAM/ **PDRD**	• Provide consultation and planning for required technical specifications. • Participate in physical study. • Monitoring the construction	3	Khmer Physical/in-person meeting	• In-person, Phone, Telegram • Commune meeting; • Involved in the design of drilling wells and excavated pond and building construction.

Type of Stakeholder	Stakeholder interest or role in project planning, implementation, and outcomes	Number of People	Language, Literacy, and Internet Use	Means of Communication / Specific Needs in the Consultation Process
DWG	• Participate in selecting and planning the construction within the SLC's Land use planning. • Monitoring and Reporting	15	Khmer Physical/in-person meeting.	• In-person, Phone, Telegram • E&S Risk and Impact consultation • GRM: Implementing, coordinating, and reporting. • Monitoring the sub-project construction in the community.
CC	• Participate in selecting and planning for the construction of CWSS • Provincial Grievance Redress Committee (PGRC) member. • Monitoring and Reporting	2	Khmer Physical/in-person meeting	• In-person, Phone, Telegram • E&S Risk and Impact consulting • GRM: Implementing, coordinating, and reporting. • Monitoring the sub-project construction in the community.
TLR	• Broader community support • Participate in selecting and planning for the construction. • Provincial Grievance Redress Committee (PGRC) member. • Monitoring the sub-project	50	Khmer Physical/in-person meeting	• In-person, Phone, Telegram • E&S Risk and Impact consultation • Provide broader community support to subproject activities • GRM Implementing, coordinating and reporting. • Participating in monitoring the sub-project construction in the community. • After the construction of the CWSS together with operation and Maintenance (O&M).

2.2. Stakeholder Engagement Plan

27. The stakeholder engagement plan (SEP) matrix in Table below describes the consultation activities in terms of information to be disclosed, means of disclosure, timing, and expected outcome of the processes of (a) the E&S Site Risk Screening, (b) physical study and design (c) procurement and contracting, (d) monitoring at the start and during construction and finally (e) operation and maintenance. It includes local stakeholders from the beneficiary IC (e.g., beneficiary ICC members, traditional authorities, community members, including women, youth, elders, as well as any adversely affected groups), facilitating project actors such as NGO(s), and national or sub-national government entities. It also indicates the **lead agency** highlighted in bold and underlined.

Table 3: Stakeholder Engagement Plan (SEP)

Process Steps Regarding Consultations on Selection and Risk Screening of Development Support	Timing	Stakeholders	Information to Be Disclosed	Means of Disclosure	Consultation Activities	Expected Outcome of Consultation
Project Outreach and Infrastructure Need Assessment	Nov -Dec 2024 (Completed)	• MLMUPC, DWG, PDRD, PDWRAM • Commune Council (CC), Village Chief,	• Project leaflets • Project GRM	• Community broad meeting.	• Community outreach identified the community's priority needs. • CC, Community meeting to propose priority needs of development support.	• Achieved broader community support through the consultation process on the sub-project development. • Develop the ESMPs for these six SLC for CWSS.
The ES Risk Screening and mitigation measures	Nov 2024 - Mar 2025 (Completed)	• **MLMUPC Infra** – PDRD, DWG, CC, TLR.	• Community needs • Physical study	• Commune meeting • CWSS assessement	• Meeting to finalize the priority needs.	

Process Steps Regarding Consultations on Selection and Risk Screening of Development Support	Timing	Stakeholders	Information to Be Disclosed	Means of Disclosure	Consultation Activities	Expected Outcome of Consultation
				• ES screening format	• Detailed design	
	Nov 2024-Mar 2025 (6 SLC sites)	• **MLMUPC ESS**, PDWRAM, PDRD, DWG • **Firm/VIDO** • CC, ICC, Village Chief • ICs and the village chief	• SLC's LUP map • Community needs	• SLC's LUP • ES screening format	• ES sub-project screening	
Physical Study and Design	Jan – Oct 2025 (Ongoing)	• **LASED III-Infra team,** PDWRAM, PDRD, DWG • CC, TLR	Result of the physical study report.	• FGD • Field survey format notes.	• community Meeting • Technical survey.	• Report the result of the field survey regarding the status of the land areas for the construction of the proposed building for clean water supply system. The land area required to construct the infrastructure, as in the above tables, is located

Process Steps Regarding Consultations on Selection and Risk Screening of Development Support	Timing	Stakeholders	Information to Be Disclosed	Means of Disclosure	Consultation Activities	Expected Outcome of Consultation
						within reserved land of SLC's LUP.
Procurement and contracting	**Mar-2026** • Contracted a successful firm	• **MLMUPC Procurement Unit** • Infrastructure Unit • ESS Unit • Successful Candidate/firm	• Procurement Process and ToR • OHS is integrated into the tender document. • ESHS specification is integrated into the work contract document • ESMP	• Announcement for Expression of Interest (EOI) • Work's contracting documents	• Development of Terms of Reference (TOR) and work contract for a successful firm.	• Selected firms to sign work contracts.
At the start of construction	**April 2026 (expected)**	• **LASED III - PDLMUPCC** • PDWRAM, PDRD, DWG, CC • TLR • Workers	• Awareness raising of OHS, ESHS, CHS, Project GRM and GRM among	• Extension training reports	• FGD and Individual interviews with contracted workers	• Confirmed commencement of the construction.

Process Steps Regarding Consultations on Selection and Risk Screening of Development Support	Timing	Stakeholders	Information to Be Disclosed	Means of Disclosure	Consultation Activities	Expected Outcome of Consultation
			contracted workers. • Inspection of worker's accommodation to ensure that it meets to minimum requirements agreed upon between the WB and the LASED III team.			
During Construction and Monitoring (Teacher's house and Roads Construction)	**Apr-Sep 2026 (expected)**	• **LASED III -** • PDWRAM/PDRD • DWG, CC • TLR • Workers • Contractor	• Health and Safety Plan of the construction site.	• Site visit report • A reporting template is provided for construction oversight • GRM reports/records	• Site Inspection • Interview of contracted workers and TLRs	• ESMP implementation from the contractor. • Corrected action for OHS, ESHS, • GRM solutions • Monitoring and Reporting

Process Steps Regarding Consultations on Selection and Risk Screening of Development Support	Timing	Stakeholders	Information to Be Disclosed	Means of Disclosure	Consultation Activities	Expected Outcome of Consultation
Operation & Maintenance (O&M)	**Post Construction**	• CC • TLR • O&M community committees • PDWRAM • PDRD	• Hand over to the mandated agencies for construction and buildings.	• Certificate of handing over the construction • Handing over the ceremony. • List of O&M community committees.	• Handing over the ceremony. • Letter/certificate of handing over. • Checklist of E&S compliance	• The community receives the CWSS • Sustainability of the use of CWSS • The CWSS maintenance are integrated into the commune investment plan (CIP).

Figure 4: E&S Consultation for clean water supply system sub-project support for Prasnoeb SLC, Kampong Chhnang in Nov – Dec 2024

Community consultation and ES risk screening at Prasnoeb communes

Survey of Water Sources

Figure 5: E&S Consultation for clean water supply system sub-project support for Koul and Tumring SLC, Kampong Thom province in Nov – Dec 2024

Community consultation and ES risk screening at Koul and Tumring communes

Survey of Water Sources in Ou Touch

Figure 6: E&S Consultation for clean water supply system sub-project support for Samkhuoy, Phluk and Srae Kor SLC, Stung Treng province in Nov – Dec 2024

Community consultation and ES risk screening at Samkhuoy, Phluk and Srae Kor communes

Survey of Water Sources in Sesan River, approx. 3km from project site

3. E&S Risks and Mitigation Measures

Table 4: The Proposed Development Supports, Impacts, and Consultation

Sites	Development Supports	Design and Specifications	Impacts	Agreement during Consultation	Remarks
1). Prasnoeb SLC	a) Drilled wells/ Boreholes b) Water treatment plant c) Water tower d) Operational office e) Water distribution pipeline f) Installation of electrical and solar systems	• Drilled two deep wells with 70m depth and 125mm diameter of PVC pipe. • Water treatment plant: 10mx15m • Water tower: 5.4mx5.4mx15m	• No related impacts of land use.	• All construction is on the reserved land according to the approval of SLC Land Use Planning.	
2). Koul and Tumring SLC	a) Excavate one pond b) Water treatment plant c) Water tower d) Operational office e) Water distribution pipeline f) Installation of electrical and solar systems	• Excavated pond: area of 14,400m² with a depth of 7m, estimated storage capacity of approximately 100,800m³ of water • Water treatment plant: 5m x7m	• No related impacts of land use.	• All construction is on the reserved land according to the approval of SLC Land Use Planning.	
3). Samkhuoy, Phluk and Srae Kor	a) Excavate one pond b) Water treatment plant c) Water tower d) Operational office e) Water distribution pipeline f) Installation of electrical and solar systems	• Excavated pond: area of 5,177 m² with a depth of 7 m, estimated storage capacity of approximately 36,240 m³ of water • Water treatment plant: 5m x7m	• No related impacts of land use.	• All construction is on the reserved land according to the approval of SLC Land Use Planning.	

3.10. Risk Mitigation Measures for Subproject Development Support

Table 5: Risk Mitigation Measures for Subproject development in Prasnoeb, Koul, Tumring, Samkhuoy, Phluk and Srae Kor SLCs

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
1. Occupational Health and Safety (OHS)											
1.1. OHS Housekeeping and General Conditions			✓				✓		i. Notify local construction/ environment inspectorates and communities of upcoming activities. ii. Relevant stakeholders are informed of the works through appropriate means and in a manner acceptable to the communities. iii. Acquire all key legally required permits for the implementation of all subproject activities. iv. Selected contractor(s) are mandated to formally agree to conduct all works following contractual requirements as designed to minimize impacts on neighboring communities and the environment. v. Appropriate signposting of the sites to inform visitors/workers of key rules and regulations. vi. First aid kits are provided, maintained, and easily accessible, with the name(s) of trained first aid officer(s) visibly displayed. vii. Construction sites are clean and clear with all sharp objects, nails, and boards removed from work areas, passageways, walkways, and resting as well as properly storing them. iii. All workers have to sign and strictly adhere to the workers' code of conduct. ix. Provide training to workers on risk management, code of conduct, and safety measures.	• Contractor	Construction stage

3 Level of Impact, H=High, S=Severe, M=Moderate, L=Low

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
1.2. Establishment and operation of worker camps could increase waste generation, water pollution, disturbance, and other direct and indirect social impacts on the local community.			✓				✓		i. Ensure that the siting of the campsite is acceptable and approved by communities and the local authority, and in line with the minimum standards. ii. Ensure that basic camp facilities are provided, including adequate and appropriate housing equipped with latrines and shower facilities, eating areas, safe water supply, mosquito nets, blankets, safe paths, a fire extinguisher, and other basic amenities as needed. iii. Ensure that washing areas are demarcated, and water from washing areas shall not flow to a natural stream or water body. iv. All wastes shall be well managed. v. Identify waste management facilities, including recycling options. vi. Minimise the waste production to the extent possible. vii. Ensure that all wastes produced are properly collected, segregated, stored, transported.. If not, use designated and approved disposal sites in line with applicable government waste management regulations. iii. Ensure wastes are not deposited in or near water bodies or rivers. ix. Burning of construction or domestic waste is not permitted. x. Regular clearing of waste bins. xi. Ensure housekeeping at the campsite, including the construction materials. The contractor shall provide training and information to ensure	• Contractor • Workers	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									awareness of appropriate waste disposal methods.		
1.3. The establishment and operation of worker camps could cause social conflict with communities.			✓				✓		i. The campsite should be appropriately located in the subproject area, ensuring no conflict with the local community. ii. Unauthorized persons shall not reside in workers' campsite. iii. Manager and workers shall strictly adhere to the workers' code of conduct attached as annex. iv. Conduct awareness sessions on respectful behavior and local customs.	• Contractor	Construction stage
1.4. The establishment and operation of worker camps could cause health and sanitation risks.			✓				✓		i. Provide clean drinking water and sanitation facilities ii. Regular cleaning of toilets and showers iii. Vector control (mosquito nets)	• Contractor	Construction stage
1.5. Accidents and incidents, including those involving moving vehicles and types of machinery			✓				✓		i. All moving vehicles and machinery are operated by trained and qualified drivers. ii. Each moving equipment operator will provide a spotter and a flagman to guide the vehicle's movement. iii. The Operator will receive relevant safety equipment and training to all equipment/ machinery and vehicle drivers. iv. All workers are protected from falling objects in the work areas v. All construction vehicles shall be equipped with proper lighting and warning systems and a seat belt system. vi. All vehicles and moving equipment/machinery should be maintained and regularly inspected.	• Contractor	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
1.6. Lack of PPE will increase the risk of workers' exposure to construction hazards.			✓				✓		i. The contractor shall provide relevant PPE to all workers. ii. Workers' PPE will comply with international good practice (with hard hats, and where needed, will use masks and safety glasses, harnesses, and safety boots) iii. All workers must use the relevant PPE at all times on the site. iv. All workers must maintain their PPE in good condition, and the assigned inspector should conduct checks on the PPE before and after use. v. Contractor must have a clear protocol for issuing warnings and releasing workers from their duties after multiple non-compliances.	• Contractor • Workers	Construction stage
1.7. Risk of injury while operating machinery and tools			✓					✓	i. The contractor needs to identify and assess the hazards and risks for operating the machinery and tools, and provide training for the operation of machinery and equipment. ii. Operators shall wear PPE properly while operating machinery/equipment. iii. The daily morning toolbox must be carried out before starting work. iv. A first aid kit and necessary medications should be available for use in case of injuries during a rescue.	• Contractor • Workers	Construction stage
1.8. E-waste management for solar panel components				✓				✓	i. Appoint an ES Focal Person at PMU responsible for managing inventory, tracking usage, and identifying end-of-life electrical and electronic equipment. ii. Upon procurement, the PMU shall document all acquired and installed ICT equipment, stating the equipment name, model, serial number,	• Contractors, workers, and MLMUPC	Installations and operational stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									ownership or leasing status, assigned user, location, maintenance history, and warranty. The inventory record must be co-signed by PMU inventory staff. iii. For damaged, faulty, and electronic devices that necessitate recycling or disposal, PIUs' ES focal person will temporarily store, sort, and keep separate at a designated location within the community for the shortest time practicable. They will confirm the end-of-life of the equipment and document its status in the asset management system before sending it to recycling. The temporary storage space needs to be: a) Cool, dry, and away from direct sunlight or heat sources b) Not prone to flooding or water/rain leakage c) Not dusty and equipped with firefighting equipment d) Accessible by authorized personnel only • **Handling Fragile Equipment:** Carefully handle and store fragile items (e.g., keep them in their original packaging). • **Transportation and disposal of E-waste.** The transport of e-waste generated should be handled by licensed facilities. Disposal service contract terms of reference should ensure that the contractor does not illegally		

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									sell, use, recycle, destroy, or move the e-waste to unauthorized users or locations. iv. The disposal service licensed facilities should establish a collection, transportation, and issuance of disposal certificates process for the generated e-waste.		
1.9. Disposal of waste generated from project sites may increase health issues for local people and the environment.			✓				✓		i. Waste collection and disposal pathways and sites should be identified for all major waste types expected from construction activities. ii. Construction wastes should be separated from general refuse, organic, liquid, and chemical wastes by on-site sorting and stored in appropriate containers. iii. Construction waste should be collected and disposed of properly by licensed collectors. iv. Whenever feasible, the contractor should be reused and recycled for appropriate and viable materials.	• Contractor • Workers	Construction stage
1.10. Storage of hazardous material			✓				✓		i. Hard, compacted, impervious, and bounded flooring should be provided for the storage of hazardous material. They should also be adequately labelled. Ensuring that no contaminated effluent is released to the environment. ii. Fuel tanks should be labeled and stored in impervious lining and dykes etc., and firefighting arrangements should also be made available. iii. All workers should be trained on hazardous material safe handling techniques.	• Contractor • Workers	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									iv. Storage and handling of hazardous materials should be included in the contractor's construction site management plan. v. Ensure that operating vehicles are checked regularly for any fuel, oil, or battery fluid leakage.		
2. Labour and Working Conditions											
2.1. Risk of Using Child Labour				✓				✓	i. Contractors shall follow a contract agreement that includes the prohibition of using child labour at construction sites. ii. Verification of age)at least 18 years old) before contracting and employment of the worker (attachment of legal document: ID card, birth certificate, etc.). iii. The contractor is to sign a code of conduct that includes not using child labour according to the ESF requirements. iv. Encouragement to hire workers from the community. v. The contractor is to attend orientation training, including labor and working conditions (LWC) from the PMU.	• Contractor	Construction stage
2.2. Risk of unfair treatment/ discrimination.				✓				✓	i. Ensure that workers are informed of their rights to submit a grievance through the Project Worker Grievance Mechanism. ii. The contractor shall follow ESF requirements and the Cambodian Labour Law.	• Contractor	Construction stage
2.3. Risk of GBV/SEA/SH				✓				✓	i. Training before construction for workers, stakeholders, and the local community on the risks of GBV/SEA/SH.	• Contractor	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									ii. Workers shall be hired or recruited from within the community iii. Women shall be encouraged to hire or recruit. iv. Ensure that workers sign the code of conduct. v. The manager's code of conduct will be properly implemented (including GBV/SEA/SH).		
3. Community, Health and Safety (CHS)											
3.1. Safety Risks to the Community due to the operation of construction, machinery, and vehicles			✓				✓		i. Consultation with the community about the construction before the commencement of work. The community people need to restrict their children and students from being around the construction site. ii. Installation of safety signage, including warnings to avoid accidents. Implement the traffic management plan (including flagman, speed limit, traffic control, traffic and warning signs, road bumper, and safe access/ crossing for pedestrians, etc). iii. Brief on safety requirements for the driver. iv. Fencing the construction site v. Restricted access to the construction site. vi. Soundproof machinery shall be used at the site. vii. Schedule noise activities at reasonable times iii. Provide a spotter during the movement of trucks in and out of the site. ix. It is particularly important to take measures and raise awareness regarding children and community members when passing by active construction areas, especially at night or when there is limited lighting.	• Contractor • Workers	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									x. Record road crashes or /accident and inform/report to PMU and the Bank no later than 24 hours as stated in the ESCP.		
3.2. Life and fire risk				✓				✓	i. Always have suitable fire extinguishers readily to hand and a fire and emergency plan in place. ii. All workers need to be trained on the fire and emergency plan/ procedure, and on how to use fire extinguishers, know the evacuation procedure, and escape routes. iii. Do not dispose of rubbish by burning it. Site 'bonfires' are prohibited and can get out of control easily. iv. Maintaining a strict no-smoking policy that is communicated to all employees and workers v. Provide a designated safe smoking area to prevent fire risks due to ash or carelessly discarded. vi. Make sure that electrical wiring is regularly inspected on the premises. vii. Take notice of any electrical items left unattended. iii. Workers must not be allowed to bring any cooking equipment to the construction site.	• Contractor	Construction stage
3.3. Risks to the community from closed construction between the latrine and the pumped well or another water source.			✓				✓		i. A toilet should be at least 20 meters from water sources (pump well, spring water, river). ii. All toilets must have a septic tank to provide primary treatment of fecal waste. iii. PVC pipe used to connect a pour-flush toilet to a septic tank must be buried underground or covered over (with cement) for protection and to prevent exposure to sunlight.	• Contractor	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									iv. Ensure there is a gas venting pipe in septic tanks. Septic tanks must have a vent pipe to prevent gas buildup inside the chamber.		
3.4. Inadequate design of buildings may lead to an impact on community health and the environment. (including Universal Accessibility)			✓				✓		i. Provide adequate drainage in the buildings' immediate surroundings to avoid standing water. Possible insect disease vectors and unsanitary conditions may develop due to inadequate drainage. ii. Maximize natural light and ventilation systems to minimize the need for artificial light and the necessity of air conditioning; use large windows for bright and well-ventilated rooms. iii. School buildings should comprise a large room for indoor activities and sanitary facilities. iv. No physical barriers that would limit the movement of individuals, especially those using wheelchairs, walkers, or other mobility devices. v. Doorways and hallways are designed to accommodate wheelchair users and others with mobility aids. vi. Non-slip surfaces: Floors and walkways are made from materials that reduce the risk of slips and falls. vii. Restrooms with grab bars, sufficient turning space for wheelchairs, and fixtures at appropriate heights.	• MLMUPC (design) • Contractor (implementation stage)	Design and Construction stage
3.5. Potential health and safety Issues/Risks from the unfinished job sites			✓				✓		i. Ensure the entire perimeter of the job site is enclosed with durable fencing (e.g., chain-link, solid wooden barriers). ii. Any entry points should be secured with locked gates when workers are absent.	• Contractor	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									iii. Place highly visible warning signs around the site that indicate "Danger" and "Construction Zone – Keep Out." iv. Use visual symbols or bright colors to ensure children understand the risks, even if they can't read. v. Site managers inspect the site regularly for vulnerabilities like gaps in fencing or damaged barriers. vi. All open trenches, holes, or pits should be securely covered or surrounded by barriers that cannot be easily bypassed. vii. Inform nearby residents about the construction site risks and encourage them to report any unauthorized access. viii. If schools and residential areas are nearby, consider organizing briefings for children or people nearby about the dangers of entering construction zones.		
3.6. Risk of Vector and Pest-Borne Disease in the Community Pond.			✓				✓		i. Ensure proper drainage to prevent stagnant water around the pond perimeter. ii. Construct sloped embankments to reduce mosquito breeding grounds. iii. Regularly remove weeds, algae, and debris that provide habitats for vectors and pests. iv. Introduce the larvivorous fish or the fish species that primarily feed on mosquito larvae and pupae. v. Promote natural predators such as frogs and dragonflies in the pond ecosystem.	• Contractor • Community	Construction stage and After construction

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									vi. Clear vegetation and undergrowth around the pond that may serve as resting or breeding sites. vii. Prevent waste disposal (solid and liquid) near or in the pond to avoid attracting flies and rodents. viii. Install fencing or signage to control human and animal access and reduce contamination. ix. Raise community awareness about vector-borne diseases and pond hygiene through outreach and training. x. Establish community pond maintenance groups responsible for regular inspections and clean-up.		
3.7. The risk of children and animals drowning in the community pond			✓				✓		i. Fencing around the pond perimeter to keep pets and wild animals alike from falling in and getting injured or trapped. xi. Rasing community awareness, especially, the parents for the risk of children and animal drowning.	• Contractor • Community	Construction stage and After construction
3.8. Damage, pressure loss, disputes of the Pipe paying/Network of clean water supply system			✓				✓		i. PVC water transmission and distribution piping need to be buried underground (coverage 50cm minimum) to protect the pipe against external damage (e.g., passing vehicles, solar UV radiation, etc.). ii. Exposing PVC pipe to UV radiation causes the plasticizer in the PVC pipe to evaporate, resulting in loss of integrity and brittleness. iii. The pipe shall be laid in a straight line, over a constantly falling slope. iv. When conditions do not allow piping to be buried (i.e., pipe is used above ground), then	• Contractor • Community	Construction stage and After construction

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									metal pipe must be used, and supported/braced as excessive movement may lead to leaks and breaks. v. Outlet pipes and fittings from water storage/basin shall not be PVC pipes due to exposure to solar UV/sunlight. Metal piping and fittings are preferred. vi.		
3.9. Risk of communicable diseases				✓				✓	i. Conduct awareness raising to the community and the workers to prevent all types of STD-related diseases. ii.	• Contractor	Construction stage
3.10. Risk of conflict between outside workers and the community.				✓				✓	i. Workers have to comply with the code of conduct. ii. Cooperate with relevant local authorities. iii. Contact persons of local authorities and police shall be shown on the whiteboard.	• Contractor • Workers	Construction stage
3.11. Disruption of transit from residence during the road improvement construction for households, especially the children and elderly.			✓					✓	i. Provide safe and strong temporary bridges or steel plates over the open ditches or main holes to access to household. ii. Deploy staff/flagmen to guide the traffic during household transit, especially the children and elderly.	• Contractor	Construction stage
3.12. Disruption of travel during culvert construction connects to the road.				✓				✓	i. Prepare a detour road for traveling during culvert structure construction ii. Install a warning sign and a safety sign	• Contractor	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
3.13. Risk of Mine/ERW Chance Finds				✓				✓	i. Engage with local communities, authorities, and an accredited demining agency to assess and address mine/ERW threats in the area. ii. Maintain ongoing collaboration with an accredited demining agency or other authorized entity for technical support, clearance, and certification prior to any construction or excavation work. iii. If mine/ERW is found, clearly mark suspected or confirmed contaminated areas and restrict access until cleared or removal by an accredited demining agency. iv. Establish coordination with local authorities and the demining Agency throughout the project lifecycle.	LASED III Contractor • Workers	during construction
4. Environment and Natural Resources											
4.1. Risk of pollution, noise, and vibration impact at the construction sites and from construction traffic			✓					✓	i. Limit the hours of operation for specific equipment or operations (typically between 11 am – 1 pm). ii. Avoid machinery/ equipment movements at night (such as trucks). iii. The machinery/equipment and vehicle shall be maintained.	• Contractor • Workers	Construction stage
4.2. Dust emissions			✓					✓	i. Conduct regular sprinkling activities to prevent dust and pollution in surrounding houses. ii. Loads with canvas to avoid dust blowing. iii. Enforce vehicle speed limits (max 20km/h)	• Contractor • Workers	Construction stage
4.3. Disposal of excavated materials, including excavation and			✓				✓		i. Stockpile the excavated material in a non-agricultural area and in a minimum area and away from storm water and flood pathways.	• Contractor	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
rehabilitation borrow pits/areas.									The disposal should be in consultation and agreement with the local authorities. ii. Excavation of borrow soil should be harnessed with slope boundaries and managed with appropriate erosion control measures. iii. The contractor should avoid placing excavated material near the houses surrounding the construction sites, as it hinders access. Moreover, safe passages around excavated material should be provided for community members.		
4.4. Pond construction/excavation (structural failure, poor soil, overflow, erosion, landslides)									i. Use proper designs and construction techniques, including compacting the soil for solid embankments. ii. The pond wall must have a proper, gentle slope that enables the pond to be filled and drained under natural gravity. If the slope is too steep, it is more prone to the effects of landslides. iii. Plant grasses or other stabilizing vegetation on the pond embankments to reduce erosion risk. iv. Fencing around the pond to protect children from entering. v. Contractor to provide information to the community on the risks of drowning and how to avoid it. vi. Line the pond with clay to reduce seepage. vii. Compact the pond floor and sides during construction to minimize water loss. iii. Consider constructing ponds in areas with natural clay soil, which is less permeable. ix. Design the pond with an overflow system, such as spillways, to handle excess water.	• Contractor	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									x. Size the pond appropriately for the area's rainfall patterns and expected runoff volume. xi. Implement proper drainage channels to divert excess water safely. xii. Conduct a geotechnical survey to assess soil stability before digging. iii. Avoid constructing ponds in areas prone to landslides or steep slopes. iv. Use terracing or retaining structures to stabilize the ground around the pond. xv. Stabilize the pond banks with vegetation (grass, shrubs, or trees) to prevent erosion. vi. Build retaining walls where needed. vii. Implement proper drainage around the pond to manage runoff.		
4.5. Risk of pipe network and household distribution (leaks, low pressure, illegal connections)			✓				✓		i. Use high-quality, pressure-rated HDPE or PVC pipes. ii. Bury pipes at an appropriate depth (≥60 cm) to protect from damage. iii. Include air valves, pressure-reducing valves, and isolation valves for better control. iv. Map the pipeline system and provide clear drawings for maintenance teams. v. Train households on how to report leaks and avoid tampering. vi. Include metered household connections or shared taps with usage monitoring. vii. Design looped distribution networks (avoid dead ends where possible).	• Contractor	Construction stage
4.6. Risks in Water Treatment Plants			✓				✓		i. Design a treatment system using future population projections (10–20 years).	• Contractor	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									ii. Choose appropriate treatment technology: e.g., filtration + chlorination. iii. Include pre-treatment (screening, sedimentation) for surface water. iv. Use solar or hybrid power systems to ensure operation during power cuts. v. Keep a minimum buffer stock of chlorine, coagulants, and parts on site. vi. Provide certified training for operators (e.g., from the Department of Rural Water Supply or NGOs). vii. Conduct monthly water quality testing (turbidity, chlorine residual, coliforms).		
4.7. Affected forests, wetlands, and/or protected areas, including risk to protected areas			✓				✓		i. All recognized natural habitats, wetlands, and protected areas within the immediate vicinity of the project areas and connected communities will not be damaged or exploited. ii. Contractor and the workers should be strictly prohibited from hunting, foraging, logging, or other damaging activities to these recognized habitats, wetlands, and protected areas within the vicinity of project areas or related communities. iii. There should not be unlicensed/unauthorized borrow pits, quarries or waste dumps for this construction, especially not in protected areas. iv. A survey and an inventory shall be made of large trees in the vicinity of the construction and project areas. Large trees should be marked and cordoned off with fencing, their root system protected, and any damage to the trees avoided.	• Contractor • Workers	Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
									v. Adjacent wetlands and streams shall be protected from construction site runoff with appropriate erosion and sediment control measures included in the construction management plan.		
4.8. Impact of increasing extraction of water from a natural river, stream, or spring, etc.				✓				✓	i. The contractor shall ensure that the water spraying for reducing dust and road compaction should not affect water resources and conflict with community use.	• Contractor	Construction stage
4.9. Environmental contamination/ spills			✓				✓		ii. Ensure proper and safe storage of hazardous material (including maintenance), i.e., the storage tank shall be put on a concrete-based slab and under the roof. iii. Provide absorbent and intervention materials in sufficient quantities and at appropriate locations for intervention in case of leakages/spills. iv. Ensure immediate cleaning of any spills and remediation of contaminated areas.	• Contractor • workers	Construction stage
4.10. Loss of fertile soil and vegetation; impacts on natural vegetation.			✓				✓		i. Remove the top layer of soil from the location, store it in a proper place, and once the construction is finished, put the soil back in that place. The leftover spoil soil should be collected and kept aside for the rehabilitation of the project site at a later stage of the work. ii. Re-vegetate the embankments with only local plant species.	• Contractor	Construction stage
4.11. Generation of Wastes during site clearance at the				✓				✓	i. Waste management (including waste separation, recycling, and proper disposal).	• Contractor	• Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
end of the construction stage									ii. Waste will be recycled, and reused as well composted. The rest of the waste will be disposed of at the approved dumpsite. iii. Provide litter bins, containers, and recycling systems for waste at construction sites. iv. No burning, burial, or disposal of hazardous waste on site. v. Construction waste will only be collected and disposed by licensed collectors. vi. The campsite and roadway shall be cleaned up after completion. vii. All cleaned-up waste shall be handled with proper procedure, including stockpiling and disposal in designated and approved areas.		• Completion stage
4.12. Water Quality (Erosion, Sedimentation and contamination)			✓				✓		i. The project site should establish appropriate erosion and sediment control measures to prevent sediment and erosion from construction sites, causing pollution to the environment. ii. Build protective fencing to protect the water sources from public access and the risk of contamination. iii. Buffer vegetation around ponds. iv. The sand/gravel filter traps sediment before the spring flow enters the collection chamber and has to be changed during periodical maintenance.	• Contractor	• Construction and post-construction stage
4.13. Risks in sourcing wood and/or other construction material (including stone, sand, gravel)			✓					✓	i. The sourcing of wood from the Protected Area must be banned. ii. Construction materials such as stone, sand, and gravel must be purchased from outside the community and from a licensed quarry.	• Contractor • IC Community • LASED III-MLMUPC	• Construction stage

Description of Risks associated with each planned sub-project	Level of Impact[3]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
from the PAs, forests, and rivers/other water bodies.									iii. Any furniture for the school must be purchased from outside the community and from a licensed provider/seller.		
4.14. Chance find of cultural heritage resources.			✓				✓		i. Once cultural heritage objects/ sites are identified, the contractor or sub-contractor shall immediately stop works within an approximate distance of the site. ii. Contractor/sub-contractor shall call EA/IA from the provincial office to the location to make a rapid determination of the significance of the find. iii. Contractor/sub-contractor shall, if a site of potentially high significance is discovered, demarcate and secure the area. iv. EA/IA, provincial Department of Culture and Fine Arts and contractor shall evaluate sites or objects in accordance to the procedure required by the Ministry of Culture and Fine Arts. v. Contractor and EA/IA shall work together to determine any requirements for community engagement in accordance with ESS10. vi. To minimize the impact to the site through partial or complete project redesign or relocation should be the preferred option from a cultural resource management perspective.	• Contractor • ICC • LASEDII-MLMUPC • Consulting Firm	• Construction stage

4. Community Sustainability and Infrastructure Operation & Maintenance

Table 6: Infrastructure Operation & Maintenance

Description of the Risk associated with each planned sub-project	Level of Impact[4]				Probability				Risk Mitigation Measures and Instruments	Responsibility	Timing
	H	S	M	L	H	S	M	L			
3.6.1 The lack of control over the operation and support maintenance in a sustainable manner post-construction.		✓				✓			i. The project will prepare to hand over the community infrastructures to the relevant provincial departments, districts, communes, and communities consistent with RGC reform policy while finalizing the community guidelines for O & M. ii. Formation of a community infrastructure management committee to support O&M. iii. Orientation O&M follows community operation and maintenance (COM). iv. Operation and maintenance are integrated into the commune investment plan (CIP). v. Implementation infrastructure O&M vi. Follow-up implementation and administration support.	• LASED III • CC and TLR communities are working closely with the provincial, district, and commune teams. • Commune operational and maintenance infrastructure committee. • Commune council with the relevant authority (Community, village chief) to support the implementation of infrastructure O&M and resource mobilization.	Post construction.

[4] *Level of Impact, H=High, S=Severe, M=Moderate, L=Low*

5. Institutional and sustainability risks for sub-project development

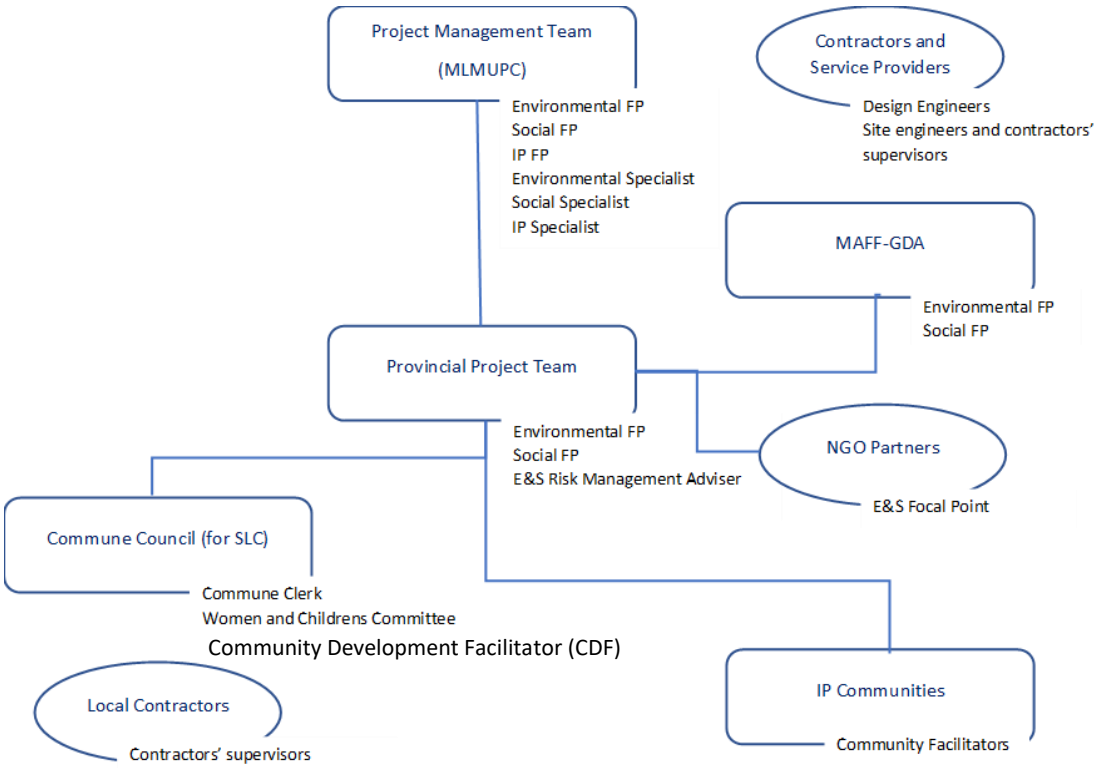
5.1 Institutional Arrangement

28. E&S unit (including E&S focal points, CDF, and E&S consultants) from MLMUPC and MAFF will be responsible for monitoring and supervising the implementation of the ESMP in coordination with the community, local authority. In addition to advising the PMU lead, the E&S unit will monitor contractor compliance, recommend and oversee remedial actions where necessary, and manage subproject-related complaints. For SEA/SH-related cases, the E&S unit will ensure confidential handling and make appropriate referrals to specialized support services, in line with project safeguards and national regulations.

29. Contractors are key actors in implementing the ESMP, responsible for carrying out mitigation measures, monitoring compliance, and reporting to the project management team. The implementation arrangement will be updated to explicitly reflect their role and responsibilities.

30. The project also supports establishing and strengthening the O&M Committee to ensure effective community mobilization and the implementation of the commune investment plan for maintaining subprojects after construction completion. The O&M Committee will be responsible for overseeing the operation, routine maintenance, and sustainability of the subprojects, coordinating with community members, and reporting on performance. Related The Provincial Department of Rural Development (PDRD) and Provincial Department of Water Resources and Meteorology (PDWRAM), along with the Commune Council, play a vital role in guiding, supporting, and facilitating the functioning of the O&M Committee to ensure that subprojects are properly maintained and continue to deliver benefits to the community.

Figure 7: Key Personnel for E&S Risk Management



5.2 Capacity Building

31. The E&S unit of MLMUPC will support refresher training (if necessary) on the ESMP, including the labor and working conditions for the provincial E&S focal points for monitoring and managing E&S risks as articulated in the ESMP/CESMP.

32. The E&S unit of MLMUPC must provide an orientation to contractors to understand and implement their E&S obligations, such as environmental, social, health, and safety (ESHS) specifications, occupational health and safety (OHS), community health and safety (CHS), Grievance Redress Mechanism (GRM).

33. The contractor must train workers, stakeholders, and the local community on Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH).

34. Under the LASED III project, the firm or contractor will provide comprehensive technical training to the community committee on the operation and maintenance of the clean water supply system. The training will include practical guidance on routine system monitoring, troubleshooting common issues, implementing preventive maintenance measures, and ensuring the long-term sustainability of the water supply infrastructure.

6. Grievance Redress Mechanism

35. The Grievance Redress Mechanism's procedure, established on December 22, 2022, will be used for this subproject. Representatives from the IP community or village, commune, district, and provincial levels comprise the Grievance Redress Mechanism (GRM) committee. GRM training will be provided to the focal points or GRM committee, and workers for the grievance redress process. Affected individuals and the community may send their complaints verbally or in writing to the local authority or drop a complaint letter in the complaint box in a village public space or at the commune administrative office. The following complaints include, but are not limited to, inquiries or ideas, rent-seeking/corruption, unfair treatment/activities, and other environmental and social issues/complaints on contractors, which may arise throughout the project support. All feedback and complaints will be processed and addressed promptly and effectively by the project. Within five working days, we will acknowledge the comments or complaints. After the grievance is lodged, the mechanism will take up to 30 working days to process it, giving time for evidence collection and analysis (if necessary). The grievance resolution process with the parties may be extended to 45 working days, but not any longer (also refer to LASED III GRM for Project Worker and affected parties).

36. The complaints may be made in writing, verbally, or electronically, also to Project GRM as below:

1). The National Grievance Redress Committee is located at the Ministry of Land Management, Urban Planning, and Construction (MLMUPC). The committee comprises:

- H.E. Khiev Borin, Project Coordinator, Chairperson, Tel: 085 806 808, Email: khieu.borin808@gmail.com
- Dr. Thol Dina, Project Director, Tel: 088 410 7778 & Email: tholdinajp@gmail.com;
- Mr. Rithy Rattanakcheyseth, Grievance Redress Officer from MLMUPC, Member, Tel: 017 988 333 & Email: rrcheyseth@yahoo.com;
- Mr. Khy Kosal, Grievance Redress Officer from MAFF, Member, Tel: 081 839 345 & Email: kosalkhy@yahoo.com
- National Social [or E&S] Risk Management Adviser/Consultant, Secretary
- Complainants can also submit their grievances or concerns on any potential adverse impacts caused by the project via email: LASEDIIIGRM@GMAIL.COM;

2). The Provincial Grievance Redress Committees of **Kampong Chhnang** are located at the provincial/ municipal halls or the Provincial Departments of Land Management, Urban Planning, Construction, and Cadastre. The committee comprises:

- LASED III Provincial Project Manager and Head of PDLMPCC, Mr. Ly Sophea, Tel/Telegram: 012 430 960
- LASED III, Environmental and Social Safeguards officer, Tel/Telegram: 069 403 783
- Representative of each relevant department, 1). Miss. Heng Kimsrieng (PDAFF) Tel/Telegram: 012 683 160 2). Mr. Hul Davun (PDRD) Tel/Telegram: 096 395 5502. 3). Mr. Khuy Khy (Commune chief) Tel/Telegram: 095 387 404.
- The provincial administration unit head, Mr. Mao Dara, Tel/Telegram: 077 589 666.
- The representative from the district chief, Mr. Phon Seiha, Tel/Telegram: 081 728 265
- Prasnoeb commune chief, Mr. Khuy Khy, Tel/Telegram: 095 387 404

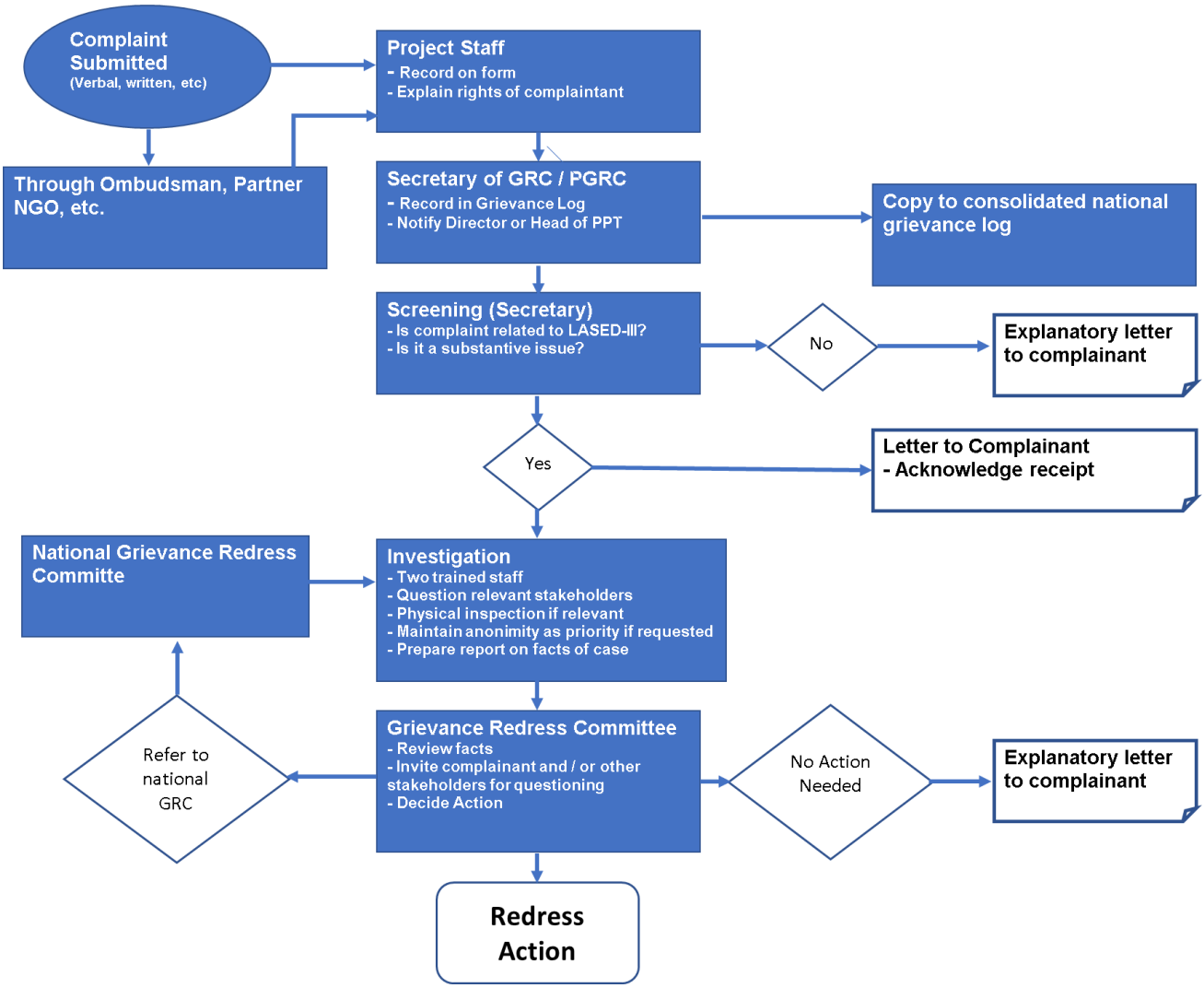
3). The Provincial Grievance Redress Committees of **Kampong Thom** are located at the provincial/ municipal halls or the Provincial Departments of Land Management, Urban Planning, Construction, and Cadastre. The committee comprises:

- Mr. Im Sodyna, Director of Provincial Department of PDLMUPCC_Kampong Thom, Project Manager of LASED III, Chairman of Provincial Grievance Redress Committee, Tel: (+855) 12 526 409 (Telegram);
- Mr. Mak Bunhong, Office Head of the Provincial Hall Inter-Section Office, the Provincial Grievance Redress Unit Tel: (+855) 17 851 267(Telegram);
- Mr. Pen Vannarith, Focus Point of LAED III, the Provincial Department of Agriculture, Forestry and Fisheries (PDAFF), Tel: (+855) 12 504 224 (Telegram);
- Mr. Nhor Hak, Focus Point, the Provincial Department of Labor and Vocational Training (PDLVT); Tel: (+855) 78 263 264;
- Mr. Sun Chuot., Focus Point, the Provincial Department of Rural Development (PDRD); Tel: (+855) 12 731 358;
- Mr. Orng Bunthoeun, Focus Point, the Provincial Department of Environment (PDoE); Tel: (+855) 12 583 467 (Telegram);
- Mr. Yun Vanny, Focus Point, the Provincial Department of Water Resources and Methodology (PDWRoM), Tel: (+855) 12 771 900 (Telegram);
- Mr. Krech Leang, Focus Point, the Provincial Department of Women Affairs (PDWA), Tel: (+855) 92 626 607 (Telegram);
- Mr. Laov Vanna, Focus Point for the Social Land Concession, the Provincial Department of PDLMUPCC, Tel: (+855) 12 857 742 (Telegram);
- Mr. Em Bunthol, Focus Point, the Provincial Department of PDLMUPCC, responsible for ESS_LASED III, Tel: (+855) 70 424 933 (Telegram);
- Mr.Sin Vannvuth, District Governor of Sandan, Kampong Thom province, Tel: (+855) 12 360 808(Telegram);
- A representative from Tumring commune administration, Mr. Sun Sovann, Tel/Telegram: 097 494 9377
- Mr. Khim Sokeang, District Governor of Prasat Sambour, Kampong Thom province, Tel: (+855) 92 869 789 (Telegram);
- Mr. Chea Tha, Chief of Koul commune, Prasat Sambour district, Kampong Thom province, Tel: (+855) 61 212 942;

4). The Provincial Grievance Redress Committees of **Stueng Traeng** is located at the provincial/ municipal halls or the Provincial Departments of Land Management, Urban Planning, Construction, and Cadastre. The committee comprises:

- Mr. Kim Piseth, Director of Provincial Department of PDLMUPCC_Stung Treng, Project Manager of LASED III, Chairman of Provincial Grievance Redress Committee, Tel: (+855) 97 808 8809 (Telegram);
- Mr. Khim Huylim, Head of Development & Construction Management Office of Provincial Hall Inter-Section Office, Tel: (+855) 97 688 2226 (Telegram);
- Mr. Ry Raksmei, Deputy Director of Forestry Administration, the Provincial Department of Agriculture, Forestry and Fisheries (PDAFF), Tel: (+855)97 714 0286(Telegram);
- Mr. Phirom Dara, Deputy Director of the Provincial Department of Labor and Vocational Training (PDLVT); Tel: (+855) 92 974 018;
- Mr. Chruy Menath, Deputy Head of Indigenous People Office, the Provincial Department of Rural Development (PDRD); Tel: (+855) 98 697 096;
- Mr. Huy Sokhun, Deputy Director of the Provincial Department of Environment (PDoE), Tel: (+855)71 988 8777 (Telegram);
- Mr. Sin Chham, Head Office, the Provincial Department of Water Resources and Methodology (PDWRoM), Tel: (+855) 97 8364 948 (Telegram);
- Mr. Koe Vannara, Deputy Director of the Provincial Department of Women Affair (PDWA), Tel: (+855)17 220 812 (Telegram);
- Mr. Sieng Sopheak, Head Office, PDLMUPCC, responsible for the Indigenous Community Land Titling, Tel: (+855) 77 686 962 (Telegram);
- Mr. Kuy Sopheara, Head Office, the PDLMUPCC, responsible for the Social Land Concession, Tel: (+855) 12 480 590 (Telegram);
- Mr. Mao Bunnarath, Head office, the PDLMUPCC, responsible for ESS_LASED III, Tel: (+855) 07 666 2429 (Telegram);
- Mr. Kong Sronos, Regional Environmental Risk Management Consultant (Region 3); based in Ratanak Kiri province, Tel: (+855) 11 894 68 (Telegram);
- Mr. Cheth Kimngoy, Regional Social Risk Management Consultant in Region 3, based in Ratanak Kiri province, Tel: (+855) 11 604 406 (Telegram);
- Mr. Sovann Piseth, Sesan District Governor, Tel: (+855) 909 2999
- Samkhuoy Commune Chief, Mrs. Khav Kham On, Tel/Telegram: 097 734 6429
- Phluk Commune Chief, Mr. Khy Chan, Tel/Telegram: 097 930 5667
- Srae Kor Commune Chief, Mr. Foeun Choeun, Tel/Telegram: 097 788 8439

Figure 8: Flow Diagram of LASED III GRM



7. Budgeting, Monitoring, and Reporting

37. Implementation of the ESMP and reporting are required under the Environmental and Social Commitment Plan (ESCP), No objection to sub-project ESMP from the World Bank must be obtained and this sub-project ESMP will be disclosed prior to any sub-project implementation under LASED III. The LASED III, MLMUPC will prepare and submit semi-annual monitoring reports on the Project's environmental, social, health, and safety (ESHS) performance, stakeholder engagement activities, and functioning of the grievance redress mechanism (GRM).

38. The contractors are also required to prepare and submit:1) the contractor's ESMP (C-ESMP) before commencing the construction and 2). The contractor's Labor Management Plan (LMP) will be sent to MLMUPC for review and clearance before commencing construction. Subsequently, the contractor is required to submit 3). A monthly ES risk management monitoring report to MLMUPC. The report should include details on the project's environmental and social performance against requirements in this ESMP in the sub-project risk and mitigation section.

39. In case of incidents and accidents, the contractor must promptly notify LASED III MLMUPC of any incident or accident related to the sub-project implementation which has or is likely to have, a significant adverse effect on the environment, the affected communities, the

public or workers (for example. an accident resulting in death or hospitalization of project workers; landmines and explosive remnants of war (ERW) incident; significant finding of cultural heritage; natural disaster affecting project beneficiaries; civil disturbances at or relating to a project site; property damage).

40. The indicative budget and detailed monitoring arrangements are described in the tables below:

Table 7: Costing of the ESMP Implementation

N	Activities	Cost Estimation (Average/Community)	6 SLC sites for 3-CWSS	Total Cost
1	ESMP consultation with the local authority and TLRs Community and disclosure	$ 1,000	3	$ 3,000
1	Awareness raising and practices OHS, ESHS, CHS, GRM, and Leaflet/booklet printing	$ 1,000	3	$ 3,000
3	Stakeholders' Engagement & Grievance Redress Mechanism Implementation	$ 2,000	3	$ 6,000
4	Supervision, Monitoring, and Reporting	$ 2,000	3	$ 6,000
5	Training for ESMP implementation	$1,500	3	$ 4,500
6	The E&S risk mitigation budget, such as PPE, construction signage, insurance, tree planting, and site camp, will be included in the bill of quantities (BoQ) for bidding and contracts for each sub-project.	$ 25,000	3	$ 75,000
	Total	**$ 32,500**	**3**	**$ 97,500**

41. This ESMP implementation will be monitored by the National and Sub-national E&S teams and E&S consultants, including the relevant stakeholders and the project management level from MLMUPC & MAFF. The monitoring shall refer to the Tables of risk and mitigation measure above.

Table 8: Monitoring Checklist

N	Type of monitoring	Mitigation Measure	Means of Verification	Responsibility	Frequency
1	**Level of awareness raising and practices**	1.1. Develop friendly leaflets on OHS, ESHS, CHS, GRM	Availability of printed leaflets	Chief of ESS	Prior to the sub-project
		1.2. Provide ToT OHS, ESHS, CHS, and GRM measures to the provincial team	ToT reports	Chief of ESS and consultants	Prior to the sub-project
		1.3. Provision of extension training OHS, ESHS, CHS, and GRM measures at the community level. • Full-day training at the construction site (before the road construction starts). • Display at the construction site and distribute the User-Friendly Leaflet on OHS & CHS as a training tool to workers.	Extension training reports	LASED III Provincial team (Focal person and consultant)	At the start of the sub-project
2	a. Risk related to Occupational Health and Safety b. Risk related to Labour and working Conditions c. Risk related to Community, Health and Safety (CHS) d. Risk related to Environment and Natural Resources e. Risk related to Agriculture and Livelihood Support	Refer to tables risks and mitigation measures above	• Training record, • GRM in place • and GRM records • Contractor Monthly report • Project Site visit report.	PDLMUCC, MAFF TLR	Throughout project implementation

N	Type of monitoring	Mitigation Measure	Means of Verification	Responsibility	Frequency
3	Grievance Redress	a) GRM functioning. b) GRM training to the focal points or GRM committee, IP community, and workers c) Make an easy way for complaint filling through the verbal or complaint boxes at the community site level, commune administration office. d) Respond to complaints through the grievance redress mechanism in a timely manner following the project's GRM including informal improvement suggestions voiced by community members to the contractor.	The Appointment of GRM Committee (LASED III Sub-national and National), GRM Training Record, Grievance redress filling for each project site, Grievance Records and Solution Responses, Worker interview, Community Interview	LASED III Sub-national Grievance Redress Mechanism Committee (GRMC), National GRMC	Construction stage
6	The lack of control post-construction over the operation and maintenance in a sustainable manner.	11.1 The project will prepare the handing over of the community infrastructures to the relevant provincial departments, districts, communes, and communities in compliance with RGC reform policy, while finalizing the community guideline for O&M. 11.2 Formation of community infrastructure management committee to support O&M. 11.3 Orientation O&M follows Community Operation and Maintenance (COM). a) Operation and maintenance of health post is integrated into the commune investment plan (CIP). b) Implementation infrastructure O&M c) Follow-up implementation and administration support.	Community Infrastructure Management Committee Formation Records of an orientation O&M following Community Operation and Maintenance (COM). M&E Report of Infrastructure O&M	• LASED III • Responsible Department for working closely with the provincial team, district and commune. • Commune Operational and Maintenance Infrastructure Committee . • Commune council with the relevant authority (Community, Village Chief) to support the implementation of	Post Construction

N	Type of monitoring	Mitigation Measure	Means of Verification	Responsibility	Frequency
				infrastructure O&M and resource mobilization.	

Annexes

ANNEX A-1: E&S Screening for Clean Water Supply System to Prasnoeb SLC

LAND ALLOCATION FOR SOCIAL AND ECONOMIC DEVELOPMENT PHASE III (LASED III)

E&S Risk Screening for Clean Water Supply System (CWSS) to Prasnoeb SLC

November 11, 2024

Table 1: Summary of planned infrastructure sub-project along with risks, impacts, and mitigation[5]

What are the planned infrastructure sub-project	Yes/No	Brief summary description of planned sub-projects, their associated risks and impacts, and the required mitigation instruments (if any).
Clean Water Supply System (CWSS) a) Drilled wells/ Boreholes: two deep wells with 70m depth and 125mm diameter of PVC pipe. b) Water treatment plant by 10mx15m a) Water tower by 5.4mx5.4mx15m b) Operational office 6mx6m c) Water distribution pipeline d) Installation of electrical and solar systems	**Yes**	The proposed CWSS will be established on reserved land within the approved Social Land Concession (SLC) site as identified in the Land Use Planning Map under LASED III. The sub-project aims to provide clean and safe drinking water for the SLC community, improving living conditions, health, and productivity. The infrastructure will be constructed within areas designated for community and public facilities, in compliance with the approved land use plan. Potential environmental risks include localized soil disturbance, dust and noise generation, improper waste handling, and possible groundwater contamination during drilling. Social risks include temporary construction-related disturbances, occupational health and safety concerns. These risks are site-specific, temporary, and manageable. An Environmental and Social Management Plan (ESMP) will be implemented, including safe waste disposal, proper siting of wells at least 20m away from sanitation facilities, PPE for workers, and community awareness on water use and hygiene. As the project is on reserved public land within the SLC, no land acquisition or resettlement impacts are expected.

[5] This brief summary shall draw on the detailed information in Table 2 below with screening questions on potential risks and impacts for specific sub-projects. So, the first step is to answer the screening questions in Table 2, and then use this information to provide the summary overview in Table 1 of the planned sub-projects, their associated risks and impacts, and the required mitigation instruments (if any).

Table 2: Screening information on Impacts and Risks for the sub-project

No.	Screening Questions	(a). Two Drilled wells	(b). Water treatment plant (10mx15 m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
1	**Location**: Will any part of the sub-project be located outside the area of the SLC?	No	No	No	No	No	No	The proposed CWSS will be established on reserved land within the approved Social Land Concession (SLC) site as identified in the Land Use Planning Map under LASED III.
2	**Water Courses**: Will the sub-project affect any water body or water-course that has a part that is outside the area of the SLC?	No	No	No	No	No	No	
3	**Labor and Working Conditions**: Will the sub-project be implemented by workers employed by a construction contractor?	Yes	Yes	Yes	Yes	Yes	Yes	The contractor will sign a Code of Conduct which protects workers' rights.
4	Will the sub-project be implemented by workers employed by any other type of contractor or service provider?	No	No	No	No	No	No	
5	Will any community workers be used to implement the sub-project?	Yes	Yes	Yes	Yes	Yes	Yes	The worker will be directly contracted by the contractor.
6	Will the sub-project require use of bricks or tiles?	Yes	Yes	Yes	Yes	Yes	No	These materials will be bought from outside the community with a licensed quarry.
7	Will the sub-project require use of agriculture planting materials produced on a commercial plantation?	No	No	No	No	No	No	

No.	Screening Questions	(a). Two Drilled wells	(b). Water treatment plant (10mx15 m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
8	Environment: Will the sub-project create dust pollution that may affect people living nearby?	Yes	Yes	Yes	Yes	Yes	Yes	Regularly watering on the dry surfaces, and excavation areas, especially during dry or windy conditions, to suppress dust emissions.
9	Will the sub-project create noise pollution that may affect people living nearby?	Yes	Yes	Yes	Yes	Yes	Yes	During the construction. Restrict noisy construction activities (e.g., drilling, excavation, machinery operation) to daytime hours only—typically between 7:00 AM and 5:00 PM—to avoid disturbing residents at night.
10	Are there any streams or water bodies that may be polluted due to the sub-project?	No	No	No	No	No	No	Prohibit on campsite building near the water source (responding by contractor)
11	Will the sub-project result in non-biodegradable solid waste that will need to be disposed of properly?	Yes	Yes	Yes	Yes	Yes	Yes	Concrete process and plastic from worker during construction. This will manage according to relevant legislation and mitigation measures.
12	**Community Health and Safety:** Will the sub-project result in increased road traffic?	No	No	No	No	No	No	
13	Will construction of the project result in road traffic hazards during construction?	No	No	No	No	No	No	Install clear and visible warning signs, reflective tape, cones, and barriers around work zones to prevent accidents.
14	Will implementation of the sub-project involve use of heavy machinery in places where the public has access?	Yes	Yes	Yes	Yes	No	No	Clearly demarcate construction zones using fencing, barricades, or tape to restrict public access to areas where heavy machinery is operating. Place visible warning signs, hazard symbols, and safety notices around machinery operation zones
15	Will any type of chemical be used in implementation of the sub-project?	No	No	No	No	No	No	

No.	Screening Questions	(a). Two Drilled wells	(b). Water treatment plant (10mx15 m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
16	Is there any known hazard of landmines/ ERW at the sub-project site or close to the sub-project site?	No	No	No	No	No	No	
17	If the sub-project involves drinking water supplies, has the supply been tested for arsenic?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
18	If the sub-project involves drinking water supplies, has the supply been tested for chemical pollution?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
19	If the sub-project involves drinking water supplies, has the supply been tested for biological pollution?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
20	**Climate Change:** Will the sub-project result in a large increase in CO_2 emissions?	No	No	No	No	No	No	Small numbers of machinery, low emission.
21	Is the sub-project in an area that is at risk of climate hazards (e.g. floods)?	No	No	No	No	No	No	
22	Is there a risk that climate change will make the project unsustainable (e.g. growing a crop that will not grow when the climate becomes hotter)?	No	No	No	No	No	No	

No.	Screening Questions	(a). Two Drilled wells	(b). Water treatment plant (10mx15 m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
23	**Land Acquisition:** Will any sub-project (or part of it) be constructed on land that is in private ownership or in private use?	No	No	No	No	No	No	The sub-project will be constructed in a reserved land according to the approved land use plan of SLC site.
24	Will any people have to move their home to make room for a sub-project?	No	No	No	No	No	No	
25	Will any people lose part of their productive land because of a sub-project?	No	No	No	No	No	No	
26	Will any sub-project be constructed on land that is used for common property resource purposes (grazing, fishing, non-timber forest products, etc.)?	No	No	No	No	No	No	
27	Will any sub-project require access to land outside the SLC site?	No	No	No	No	No	No	
28	If any land is required for any sub-project (whether inside or outside the SLC or IC site), how will it be obtained?	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	
29	**Natural Resources:** Will any sub-project result in increased extraction of water from a natural river, stream, or spring?	No	No	No	No	No	No	But not too much water use from this small scale construction period.

No.	Screening Questions	(a). Two Drilled wells	(b). Water treatment plant (10mx15 m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
30	Will the sub-project result in increased extraction of water from a natural lake?	No	No	No	No	No	No	
31	Will any sub-project result in increased extraction of groundwater (except for domestic consumption)?	No	No	No	No	No	No	
32	Will any sub-project be constructed in any area that is natural forest or natural wetland now?	No	No	No	No	No	No	
33	Are there any areas that are important for biodiversity within 1km of any sub-project?	No	No	No	No	No	No	
34	Will any sub-project require extraction of mineral resources, stone, gravel, or sand of any kind?	Yes	Yes	Yes	Yes	Yes	Yes	These materials will be bought from outside the community with a licensed quarry.
35	**Cultural Heritage:** Are there any places of tangible cultural heritage (ancient temples, valuable cultural buildings, places that are culturally important to local communities) that may be affected by any sub-project?	No	No	No	No	No	No	
36	Are there any places that are important because of their natural beauty (e.g. waterfalls, lakes, etc.) that may be affected by any sub-project?	No	No	No	No	No	No	

No.	Screening Questions	(a). Two Drilled wells	(b). Water treatment plant (10mx15 m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
37	Are there any risks that a sub-project will have a negative effect on non-physical cultural heritage that is important to the local community?	No	No	No	No	No	No	
38	**Indigenous People:** Will any sub-project affect any indigenous minority people In any way (as beneficiaries or adversely)?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
39	If any sub-project will affect indigenous minority people, have they been fully consulted and agreed to the sub-project(s)?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
40	Will any indigenous minority people outside the SLC site be affected by a sub-project, and if so, have they been fully consulted and agreed to the sub-project?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
41	**Stakeholder Consultation:** Whether they are intended beneficiaries or adversely impacted, have the communities that will be affected by the sub-project been informed about the subproject plans?	Yes	Yes	Yes	Yes	Yes	Yes	Community outreach consultations, infrastructure needs assessments, and design meetings have been conducted as part of the engagement process. These consultations involved not only community members and representatives but also commune and district authorities, as well as other relevant provincial departments, ensuring comprehensive input and collaboration.

No.	Screening Questions	(a). Two Drilled wells	(b). Water treatment plant (10mx15 m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
42	Have the communities that will be affected by the sub-project participated in discussions about the design of the sub-project and mitigation of its adverse impacts (if any)?	Yes	Yes	Yes	Yes	Yes	Yes	All stakeholder consultation meeting and community engagement session were held within the community. These focused on Environmental and Social (E&S) risk screening and the technical study for the detailed engineering design. The discussions included construction design, land requirements for buildings, associated risks, and proposed mitigation measures. This collaborative approach ensured that community members played an active role in shaping decisions, fostering a sense of ownership and alignment with their priorities and expectations. Their involvement has been central to identifying and addressing potential social and environmental impacts, paving the way for a more sustainable and inclusive implementation of the project. However, there is no adverse impact to the community on this project support.
43	Have there been any objections to any aspect of the sub-project from the local community?	No	No	No	No	No	No	Throughout the full community engagement and consultation process, there have been no objections to these sub-projects construction. As there are no concerns regarding land acquisition, property loss, or cultural impact and the support from LASED III aligns with the community's needs, providing tangible benefits to all.

Conclusion:

The proposed Clean Water Supply System (CWSS) sub-project for Prasnoeb SLC is assessed to be environmentally and socially feasible and consistent with the ESF. The project components—including two drilled wells, a water treatment plant, a water tower, an operational office, a water distribution network, and solar/electrical systems—are all located within the approved reserved land designated for public and community use in the SLC Land Use Plan.

The screening results confirm that potential risks and impacts are low to moderate, site-specific, and readily manageable through the implementation of a comprehensive Environmental and Social Management Plan (ESMP). Key risks include temporary dust, noise, and waste generation during construction, and occupational health and safety concerns—all of which will be mitigated in line with ESS1: Assessment and Management of Environmental and Social Risks and Impacts and ESS2: Labor and Working Conditions. Proper management of drilling, waste disposal, and worker safety will ensure compliance with national regulations and the ESMP requirements.

No impacts related to land acquisition or involuntary resettlement (ESS5), Indigenous Peoples (ESS7), or cultural heritage (ESS8) have been identified. The sub-project area does not overlap with any natural habitats or biodiversity-sensitive areas, aligning with ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

Meaningful stakeholder consultations were conducted with affected communities, local authorities, and relevant provincial departments, ensuring full participation and broad community support, in compliance with ESS10: Stakeholder Engagement and Information Disclosure. No objections or grievances were raised during consultations.

Accordingly, the proposed CWSS sub-project is recommended for implementation, subject to the application of the proposed mitigation measures and continued monitoring in line with the ESMP. The project will enhance sustainable access to clean and safe drinking water, thereby improving public health, community well-being, and resilience in the Prasnoeb SLC area.

ANNEX A-2: E&S Screening for Clean Water Supply System to Samkhuoy, Phluk and Srae Kor SLC, Sensan district, Stueng Traeng Province

LAND ALLOCATION FOR SOCIAL AND ECONOMIC DEVELOPMENT PHASE III (LASED III)

E&S Risk Screening for Clean Water Supply System (CWSS) to Samkhuoy, Phluk and Srae Kor SLC

November 18, 2024

Table 1: Summary of planned infrastructure sub-project along with risks, impacts, and mitigation[6] (in *Samkhuoy, Phluk and Srae Kor SLC*)

What are the planned infrastructure sub-project	Yes/No	Brief summary description of planned sub-projects, their associated risks and impacts, and the required mitigation instruments (if any).
Clean Water Supply System (CWSS) **a)** Excavating Pond: 100m by 50m by 7m depth. **b)** Water treatment plant by 10mx15m **c)** Water tower by 5.4mx5.4mx15m **d)** Operational office 6mx6m **e)** Water distribution pipeline **f)** Installation of electrical and solar systems	**Yes**	The proposed CWSS will be implemented on **reserved land within the approved Social Land Concession (SLC) site** under the **LASED III project**, following the approved land use plan. The project aims to improve access to clean and safe water for SLC beneficiaries, contributing to better health, sanitation, and livelihood outcomes. The system includes excavation of a raw water pond, construction of a water treatment plant and elevated storage tower, an operational office for system management, installation of water pipelines, and solar/electrical systems for operation. Potential environmental risks include soil erosion, sedimentation from pond excavation, dust and noise during construction, improper spoil disposal, water contamination, and occupational health and safety hazards. Social risks include temporary disturbance to nearby residents, construction-related safety risks. These risks are localized, temporary, and manageable through proper planning and supervision. An Environmental and Social Management Plan (ESMP) will be implemented to ensure compliance with the ESF. Key measures include: erosion and sediment control, designated spoil disposal areas, fencing and safety signage around the pond, provision of PPE for workers, proper waste management, and community awareness on water safety and hygiene. Since construction takes place on reserved community land, no land acquisition or resettlement impacts are anticipated.

[6] This brief summary shall draw on the detailed information in Table 2 below with screening questions on potential risks and impacts for specific sub-projects. So, the first step is to answer the screening questions in Table 2, and then use this information to provide the summary overview in Table 1 of the planned sub-projects, their associated risks and impacts, and the required mitigation instruments (if any).

Table 2: Screening information on Impacts and Risks for the sub-project

No.	Screening Questions	(a). Excavating Ponds (100mx10mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
1	**Location**: Will any part of the sub-project be located outside the area of the SLC?	No	No	No	No	No	No	The proposed CWSS will be established on reserved land within the approved Social Land Concession (SLC) site as identified in the Land Use Planning Map under LASED III.
2	**Water Courses**: Will the sub-project affect any water body or water-course that has a part that is outside the area of the SLC?	No	No	No	No	No	No	
3	**Labor and Working Conditions**: Will the sub-project be implemented by workers employed by a construction contractor?	Yes	Yes	Yes	Yes	Yes	Yes	The contractor will sign a Code of Conduct which protects workers' rights.
4	Will the sub-project be implemented by workers employed by any other type of contractor or service provider?	No	No	No	No	No	No	
5	Will any community workers be used to implement the sub-project?	Yes	Yes	Yes	Yes	Yes	Yes	The worker will be directly contracted by the contractor.
6	Will the sub-project require use of bricks or tiles?	Yes	Yes	Yes	Yes	Yes	No	These materials will be bought from outside the community with a licensed quarry.
7	Will the sub-project require use of agriculture planting materials produced on a commercial plantation?	No	No	No	No	No	No	

No.	Screening Questions	(a). Excavating Ponds (100mx10mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
8	Environment: Will the sub-project create dust pollution that may affect people living nearby?	Yes	Yes	Yes	Yes	Yes	Yes	Regularly watering on the dry surfaces, and excavation areas, especially during dry or windy conditions, to suppress dust emissions.
9	Will the sub-project create noise pollution that may affect people living nearby?	Yes	Yes	Yes	Yes	Yes	Yes	During the construction. Restrict noisy construction activities (e.g., drilling, excavation, machinery operation) to daytime hours only—typically between 7:00 AM and 5:00 PM—to avoid disturbing residents at night.
10	Are there any streams or water bodies that may be polluted due to the sub-project?	No	No	No	No	No	No	Prohibit on campsite building near the water source (responding by contractor)
11	Will the sub-project result in non-biodegradable solid waste that will need to be disposed of properly?	Yes	Yes	Yes	Yes	Yes	Yes	Concrete process and plastic from worker during construction. This will manage according to relevant legislation and mitigation measures.
12	**Community Health and Safety:** Will the sub-project result in increased road traffic?	No	No	No	No	No	No	
13	Will construction of the project result in road traffic hazards during construction?	No	No	No	No	No	No	Install clear and visible warning signs, reflective tape, cones, and barriers around work zones to prevent accidents.
14	Will implementation of the sub-project involve use of heavy machinery in places where the public has access?	Yes	Yes	Yes	Yes	No	No	Clearly demarcate construction zones using fencing, barricades, or tape to restrict public access to areas where heavy machinery is operating. Place visible warning signs, hazard symbols, and safety notices around machinery operation zones
15	Will any type of chemical be used in implementation of the sub-project?	No	No	No	No	No	No	

No.	Screening Questions	(a). Excavating Ponds (100mx10mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
16	Is there any known hazard of landmines/ ERW at the sub-project site or close to the sub-project site?	No	No	No	No	No	No	
17	If the sub-project involves drinking water supplies, has the supply been tested for arsenic?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
18	If the sub-project involves drinking water supplies, has the supply been tested for chemical pollution?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
19	If the sub-project involves drinking water supplies, has the supply been tested for biological pollution?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
20	**Climate Change:** Will the sub-project result in a large increase in CO_2 emissions?	No	No	No	No	No	No	Small numbers of machinery, low emission.
21	Is the sub-project in an area that is at risk of climate hazards (e.g. floods)?	No	No	No	No	No	No	
22	Is there a risk that climate change will make the project unsustainable (e.g. growing a crop that will not grow when the climate becomes hotter)?	No	No	No	No	No	No	

No.	Screening Questions	(a). Excavating Ponds (100mx10mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
23	**Land Acquisition:** Will any sub-project (or part of it) be constructed on land that is in private ownership or in private use?	No	No	No	No	No	No	The sub-project will be constructed in a reserved land according to the approved land use plan of SLC site.
24	Will any people have to move their home to make room for a sub-project?	No	No	No	No	No	No	
25	Will any people lose part of their productive land because of a sub-project?	No	No	No	No	No	No	
26	Will any sub-project be constructed on land that is used for common property resource purposes (grazing, fishing, non-timber forest products, etc.)?	No	No	No	No	No	No	
27	Will any sub-project require access to land outside the SLC site?	No	No	No	No	No	No	
28	If any land is required for any sub-project (whether inside or outside the SLC or IC site), how will it be obtained?	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	
29	**Natural Resources:** Will any sub-project result in increased extraction of water from a natural river, stream, or spring?	No	No	No	No	No	No	But not too much water use from this small scale construction period.

No.	Screening Questions	(a). Excavating Ponds (100mx10mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
30	Will the sub-project result in increased extraction of water from a natural lake?	No	No	No	No	No	No	
31	Will any sub-project result in increased extraction of groundwater (except for domestic consumption)?	No	No	No	No	No	No	
32	Will any sub-project be constructed in any area that is natural forest or natural wetland now?	No	No	No	No	No	No	
33	Are there any areas that are important for biodiversity within 1km of any sub-project?	No	No	No	No	No	No	
34	Will any sub-project require extraction of mineral resources, stone, gravel, or sand of any kind?	Yes	Yes	Yes	Yes	Yes	Yes	These materials will be bought from outside the community with a licensed quarry.
35	**Cultural Heritage:** Are there any places of tangible cultural heritage (ancient temples, valuable cultural buildings, places that are culturally important to local communities) that may be affected by any sub-project?	No	No	No	No	No	No	
36	Are there any places that are important because of their natural beauty (e.g. waterfalls, lakes, etc.) that may be affected by any sub-project?	No	No	No	No	No	No	

No.	Screening Questions	(a). Excavating Ponds (100mx10mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
37	Are there any risks that a sub-project will have a negative effect on non-physical cultural heritage that is important to the local community?	No	No	No	No	No	No	
38	**Indigenous People:** Will any sub-project affect any indigenous minority people In any way (as beneficiaries or adversely)?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
39	If any sub-project will affect indigenous minority people, have they been fully consulted and agreed to the sub-project(s)?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
40	Will any indigenous minority people outside the SLC site be affected by a sub-project, and if so, have they been fully consulted and agreed to the sub-project?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
41	**Stakeholder Consultation:** Whether they are intended beneficiaries or adversely impacted, have the communities that will be affected by the sub-project been informed about the subproject plans?	Yes	Yes	Yes	Yes	Yes	Yes	Community outreach consultations, infrastructure needs assessments, and design meetings have been conducted as part of the engagement process. These consultations involved not only community members and representatives but also commune and district authorities, as well as other relevant provincial departments, ensuring comprehensive input and collaboration.

No.	Screening Questions	(a). Excavating Ponds (100mx10mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
42	Have the communities that will be affected by the sub-project participated in discussions about the design of the sub-project and mitigation of its adverse impacts (if any)?	Yes	Yes	Yes	Yes	Yes	Yes	All stakeholder consultation meeting and community engagement session were held within the community. These focused on Environmental and Social (E&S) risk screening and the technical study for the detailed engineering design. The discussions included construction design, land requirements for buildings, associated risks, and proposed mitigation measures. This collaborative approach ensured that community members played an active role in shaping decisions, fostering a sense of ownership and alignment with their priorities and expectations. Their involvement has been central to identifying and addressing potential social and environmental impacts, paving the way for a more sustainable and inclusive implementation of the project. However, there is no adverse impact to the community on this project support.
43	Have there been any objections to any aspect of the sub-project from the local community?	No	No	No	No	No	No	Throughout the full community engagement and consultation process, there have been no objections to these sub-projects construction. As there are no concerns regarding land acquisition, property loss, or cultural impact and the support from LASED III aligns with the community's needs, providing tangible benefits to all.

Conclusion:

The Environmental and Social (E&S) risk screening for the proposed **Clean Water Supply System (CWSS)** to **Samkhuoy, Phluk, and Srae Kor Social Land Concessions (SLCs)** under the **LASED III** Project confirms that the sub-project is **environmentally and socially feasible**. All planned infrastructure components—including the excavation of a raw water pond, construction of a water treatment plant, elevated water tower, operational office, installation of a water distribution pipeline, and electrical and solar systems—will be established on **reserved land within the approved SLC site**, as defined in the endorsed Land Use Plan.

The screening results indicate that the anticipated environmental and social risks are minor, localized, and temporary, primarily related to construction activities such as soil erosion, dust generation, noise, waste management, and occupational health and safety concerns. These potential impacts are readily manageable through standard mitigation measures outlined in the Environmental and Social Management Plan (ESMP). No land acquisition, involuntary resettlement, or impacts on Indigenous Peoples, natural habitats, or cultural heritage are anticipated.

No impacts related to land acquisition or involuntary resettlement (ESS5), Indigenous Peoples (ESS7), or cultural heritage (ESS8) have been identified. The sub-project area does not overlap with any natural habitats or biodiversity-sensitive areas, aligning with ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. Extensive stakeholder consultations were conducted within the three SLC communities, confirming broad community support, active participation in project design discussions, and no recorded objections to the proposed works.

In conclusion, the CWSS sub-project is classified as having a **Low Environmental and Social Risk Level** and is therefore **recommended for implementation**, subject to strict adherence to the ESMP, national environmental legislation, and the ESF requirements throughout all stages of project planning, construction, and operation.

ANNEX A-3: E&S Screening for Clean Water Supply System to Koul and Tumring SLC, Kampong Thom Province

LAND ALLOCATION FOR SOCIAL AND ECONOMIC DEVELOPMENT PHASE III (LASED III)

E&S Risk Screening for Clean Water Supply System (CWSS) to Koul and Tumring SLC, Kampong Thom Province

December 9, 2024

Table 1: Summary of planned infrastructure sub-project along with risks, impacts, and mitigation[7] (in *Koul and Tumring SLC*)

What are the planned infrastructure sub-project	Yes/No	Brief summary description of planned sub-projects, their associated risks and impacts, and the required mitigation instruments (if any).
Clean Water Supply System (CWSS) **g)** Excavating Pond: 160m by 90m by 7m depth. **h)** Water treatment plant by 10mx15m **i)** Water tower by 5.4mx5.4mx15m **j)** Operational office 6mx6m **k)** Water distribution pipeline **l)** Installation of electrical and solar systems	**Yes**	The proposed CWSS will be implemented on **reserved land within the approved Social Land Concession (SLC) site** under the **LASED III project**, following the approved land use plan. The project aims to improve access to clean and safe water for SLC beneficiaries, contributing to better health, sanitation, and livelihood outcomes. The system includes excavation of a raw water pond, construction of a water treatment plant and elevated storage tower, an operational office for system management, installation of water pipelines, and solar/electrical systems for operation. Potential environmental risks include soil erosion, sedimentation from pond excavation, dust and noise during construction, improper spoil disposal, water contamination, and occupational health and safety hazards. Social risks include temporary disturbance to nearby residents, construction-related safety risks. These risks are localized, temporary, and manageable through proper planning and supervision. An Environmental and Social Management Plan (ESMP) will be implemented to ensure compliance with the ESF. Key measures include: erosion and sediment control, designated spoil disposal areas, fencing and safety signage around the pond, provision of PPE for workers, proper waste management, and community awareness on water safety and hygiene. Since construction takes place on reserved community land, no land acquisition or resettlement impacts are anticipated.

[7] This brief summary shall draw on the detailed information in Table 2 below with screening questions on potential risks and impacts for specific sub-projects. So, the first step is to answer the screening questions in Table 2, and then use this information to provide the summary overview in Table 1 of the planned sub-projects, their associated risks and impacts, and the required mitigation instruments (if any).

Table 2: Screening information on Impacts and Risks for the sub-project

No.	Screening Questions	(a). Excavating Ponds (160mx90mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
1	**Location**: Will any part of the sub-project be located outside the area of the SLC?	No	No	No	No	No	No	The proposed CWSS will be established on reserved land within the approved Social Land Concession (SLC) site as identified in the Land Use Planning Map under LASED III.
2	**Water Courses**: Will the sub-project affect any water body or water-course that has a part that is outside the area of the SLC?	No	No	No	No	No	No	
3	**Labor and Working Conditions**: Will the sub-project be implemented by workers employed by a construction contractor?	Yes	Yes	Yes	Yes	Yes	Yes	The contractor will sign a Code of Conduct which protects workers' rights.
4	Will the sub-project be implemented by workers employed by any other type of contractor or service provider?	No	No	No	No	No	No	
5	Will any community workers be used to implement the sub-project?	Yes	Yes	Yes	Yes	Yes	Yes	The worker will be directly contracted by the contractor.
6	Will the sub-project require use of bricks or tiles?	Yes	Yes	Yes	Yes	Yes	No	These materials will be bought from outside the community with a licensed quarry.
7	Will the sub-project require use of agriculture planting materials produced on a commercial plantation?	No	No	No	No	No	No	

No.	Screening Questions	(a). Excavating Ponds (160mx90mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
8	Environment: Will the sub-project create dust pollution that may affect people living nearby?	Yes	Yes	Yes	Yes	Yes	Yes	Regularly watering on the dry surfaces, and excavation areas, especially during dry or windy conditions, to suppress dust emissions.
9	Will the sub-project create noise pollution that may affect people living nearby?	Yes	Yes	Yes	Yes	Yes	Yes	During the construction. Restrict noisy construction activities (e.g., drilling, excavation, machinery operation) to daytime hours only—typically between 7:00 AM and 5:00 PM—to avoid disturbing residents at night.
10	Are there any streams or water bodies that may be polluted due to the sub-project?	No	No	No	No	No	No	Prohibit on campsite building near the water source (responding by contractor)
11	Will the sub-project result in non-biodegradable solid waste that will need to be disposed of properly?	Yes	Yes	Yes	Yes	Yes	Yes	Concrete process and plastic from worker during construction. This will manage according to relevant legislation and mitigation measures.
12	**Community Health and Safety:** Will the sub-project result in increased road traffic?	No	No	No	No	No	No	
13	Will construction of the project result in road traffic hazards during construction?	No	No	No	No	No	No	Install clear and visible warning signs, reflective tape, cones, and barriers around work zones to prevent accidents.
14	Will implementation of the sub-project involve use of heavy machinery in places where the public has access?	Yes	Yes	Yes	Yes	No	No	Clearly demarcate construction zones using fencing, barricades, or tape to restrict public access to areas where heavy machinery is operating. Place visible warning signs, hazard symbols, and safety notices around machinery operation zones
15	Will any type of chemical be used in implementation of the sub-project?	No	No	No	No	No	No	

No.	Screening Questions	(a). Excavating Ponds (160mx90mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
16	Is there any known hazard of landmines/ ERW at the sub-project site or close to the sub-project site?	No	No	No	No	No	No	
17	If the sub-project involves drinking water supplies, has the supply been tested for arsenic?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
18	If the sub-project involves drinking water supplies, has the supply been tested for chemical pollution?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
19	If the sub-project involves drinking water supplies, has the supply been tested for biological pollution?	Yes	Yes	Yes	No	Yes	No	Drilled Well: The water quality will be tested.
20	**Climate Change:** Will the sub-project result in a large increase in CO_2 emissions?	No	No	No	No	No	No	Small numbers of machinery, low emission.
21	Is the sub-project in an area that is at risk of climate hazards (e.g. floods)?	No	No	No	No	No	No	
22	Is there a risk that climate change will make the project unsustainable (e.g. growing a crop that will not grow when the climate becomes hotter)?	No	No	No	No	No	No	

No.	Screening Questions	(a). Excavating Ponds (160mx90mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
23	**Land Acquisition:** Will any sub-project (or part of it) be constructed on land that is in private ownership or in private use?	No	No	No	No	No	No	The sub-project will be constructed in a reserved land according to the approved land use plan of SLC site.
24	Will any people have to move their home to make room for a sub-project?	No	No	No	No	No	No	
25	Will any people lose part of their productive land because of a sub-project?	No	No	No	No	No	No	
26	Will any sub-project be constructed on land that is used for common property resource purposes (grazing, fishing, non-timber forest products, etc.)?	No	No	No	No	No	No	
27	Will any sub-project require access to land outside the SLC site?	No	No	No	No	No	No	
28	If any land is required for any sub-project (whether inside or outside the SLC or IC site), how will it be obtained?	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	Approved landuse plan	
29	**Natural Resources:** Will any sub-project result in increased extraction of water from a natural river, stream, or spring?	No	No	No	No	No	No	But not too much water use from this small scale construction period.

No.	Screening Questions	(a). Excavating Ponds (160mx90mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
30	Will the sub-project result in increased extraction of water from a natural lake?	No	No	No	No	No	No	
31	Will any sub-project result in increased extraction of groundwater (except for domestic consumption)?	No	No	No	No	No	No	
32	Will any sub-project be constructed in any area that is natural forest or natural wetland now?	No	No	No	No	No	No	
33	Are there any areas that are important for biodiversity within 1km of any sub-project?	No	No	No	No	No	No	
34	Will any sub-project require extraction of mineral resources, stone, gravel, or sand of any kind?	Yes	Yes	Yes	Yes	Yes	Yes	These materials will be bought from outside the community with a licensed quarry.
35	**Cultural Heritage:** Are there any places of tangible cultural heritage (ancient temples, valuable cultural buildings, places that are culturally important to local communities) that may be affected by any sub-project?	No	No	No	No	No	No	
36	Are there any places that are important because of their natural beauty (e.g. waterfalls, lakes, etc.) that may be affected by any sub-project?	No	No	No	No	No	No	

No.	Screening Questions	(a). Excavating Ponds (160mx90mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
37	Are there any risks that a sub-project will have a negative effect on non-physical cultural heritage that is important to the local community?	No	No	No	No	No	No	
38	**Indigenous People:** Will any sub-project affect any indigenous minority people In any way (as beneficiaries or adversely)?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
39	If any sub-project will affect indigenous minority people, have they been fully consulted and agreed to the sub-project(s)?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
40	Will any indigenous minority people outside the SLC site be affected by a sub-project, and if so, have they been fully consulted and agreed to the sub-project?	No	No	No	No	No	No	No Indigenous Peoples identified in or near the SLC site.
41	**Stakeholder Consultation:** Whether they are intended beneficiaries or adversely impacted, have the communities that will be affected by the sub-project been informed about the subproject plans?	Yes	Yes	Yes	Yes	Yes	Yes	Community outreach consultations, infrastructure needs assessments, and design meetings have been conducted as part of the engagement process. These consultations involved not only community members and representatives but also commune and district authorities, as well as other relevant provincial departments, ensuring comprehensive input and collaboration.

No.	Screening Questions	(a). Excavating Ponds (160mx90mx7m)	(b). Water treatment plant (10mx15m)	(c). Water tower	(d). Operational office	(e). Water distribution pipeline	(f). Installation of electrical and solar systems	Remarks
42	Have the communities that will be affected by the sub-project participated in discussions about the design of the sub-project and mitigation of its adverse impacts (if any)?	Yes	Yes	Yes	Yes	Yes	Yes	All stakeholder consultation meeting and community engagement session were held within the community. These focused on Environmental and Social (E&S) risk screening and the technical study for the detailed engineering design. The discussions included construction design, land requirements for buildings, associated risks, and proposed mitigation measures. This collaborative approach ensured that community members played an active role in shaping decisions, fostering a sense of ownership and alignment with their priorities and expectations. Their involvement has been central to identifying and addressing potential social and environmental impacts, paving the way for a more sustainable and inclusive implementation of the project. However, there is no adverse impact to the community on this project support.
43	Have there been any objections to any aspect of the sub-project from the local community?	No	No	No	No	No	No	Throughout the full community engagement and consultation process, there have been no objections to these sub-projects construction. As there are no concerns regarding land acquisition, property loss, or cultural impact and the support from LASED III aligns with the community's needs, providing tangible benefits to all.

Conclusion:

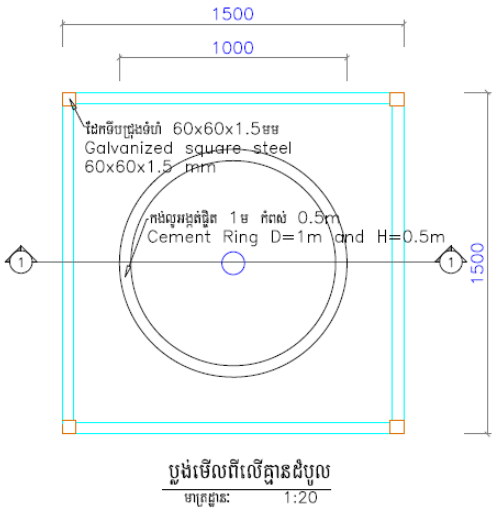
The Environmental and Social (E&S) risk screening for the proposed **Clean Water Supply System (CWSS)** to **Koul and Tumring SLCs** under the **LASED III** Project confirms that the sub-project is **environmentally and socially feasible**. All planned infrastructure components—including the excavation of a raw water pond, construction of a water treatment plant, elevated water tower, operational office, installation of a water distribution pipeline, and electrical and solar systems—will be established on **reserved land within the approved SLC site**, as defined in the endorsed Land Use Plan.

The screening results indicate that the anticipated environmental and social risks are minor, localized, and temporary, primarily related to construction activities such as soil erosion, dust generation, noise, waste management, and occupational health and safety concerns. These potential impacts are readily manageable through standard mitigation measures outlined in the Environmental and Social Management Plan (ESMP). No land acquisition, involuntary resettlement, or impacts on Indigenous Peoples, natural habitats, or cultural heritage are anticipated.

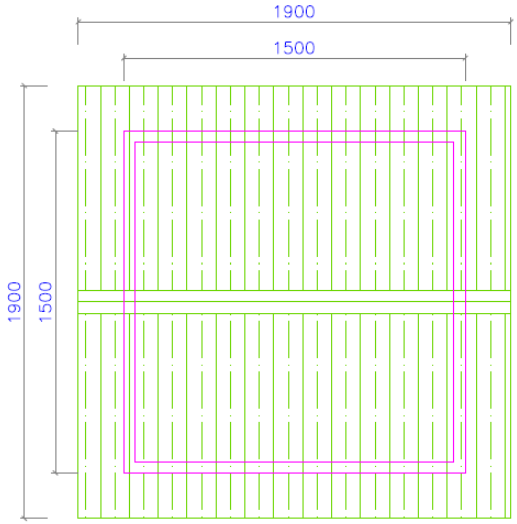
No impacts related to land acquisition or involuntary resettlement (ESS5), Indigenous Peoples (ESS7), or cultural heritage (ESS8) have been identified. The sub-project area does not overlap with any natural habitats or biodiversity-sensitive areas, aligning with ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. Extensive stakeholder consultations were conducted within the three SLC communities, confirming broad community support, active participation in project design discussions, and no recorded objections to the proposed works.

In conclusion, the CWSS sub-project is classified as having a **Low Environmental and Social Risk Level** and is therefore **recommended for implementation**, subject to strict adherence to the ESMP, national environmental legislation, and the ESF requirements throughout all stages of project planning, construction, and operation.

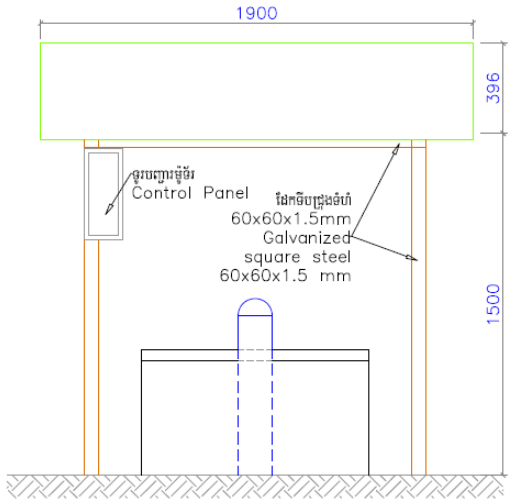
Annex B: Technical drawing of borehole (new ground water source) in Prasnoeb SLC



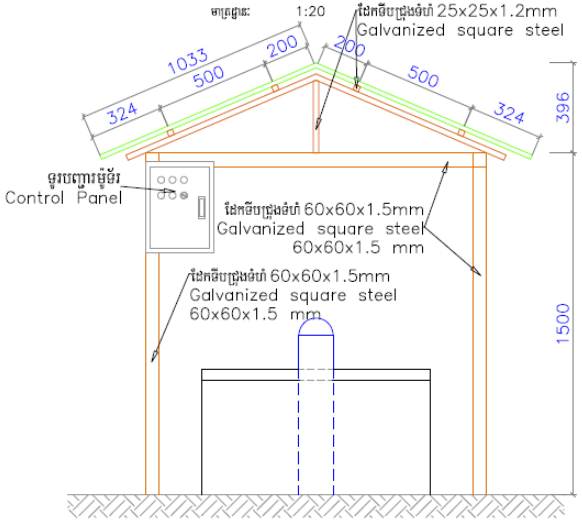
ប្លង់មើលពីលើគ្រានដំបូល
មាត្រដ្ឋាន: 1:20



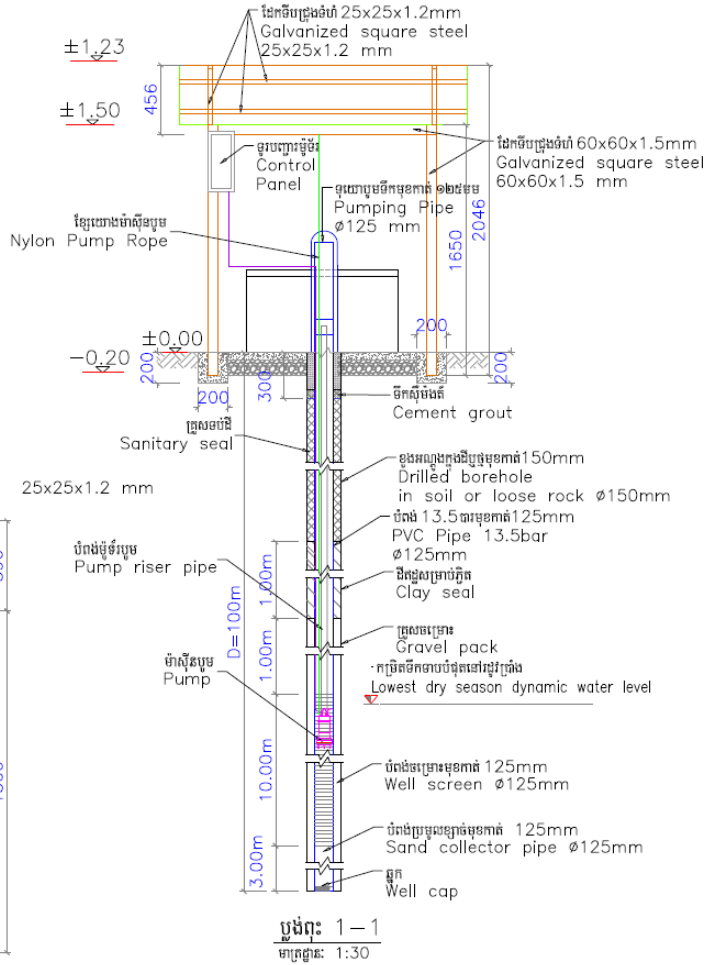
ប្លង់មើលពីលើមានដំបូល
មាត្រដ្ឋាន: 1:20



ប្លង់មើលពីមុខ
មាត្រដ្ឋាន: 1:20



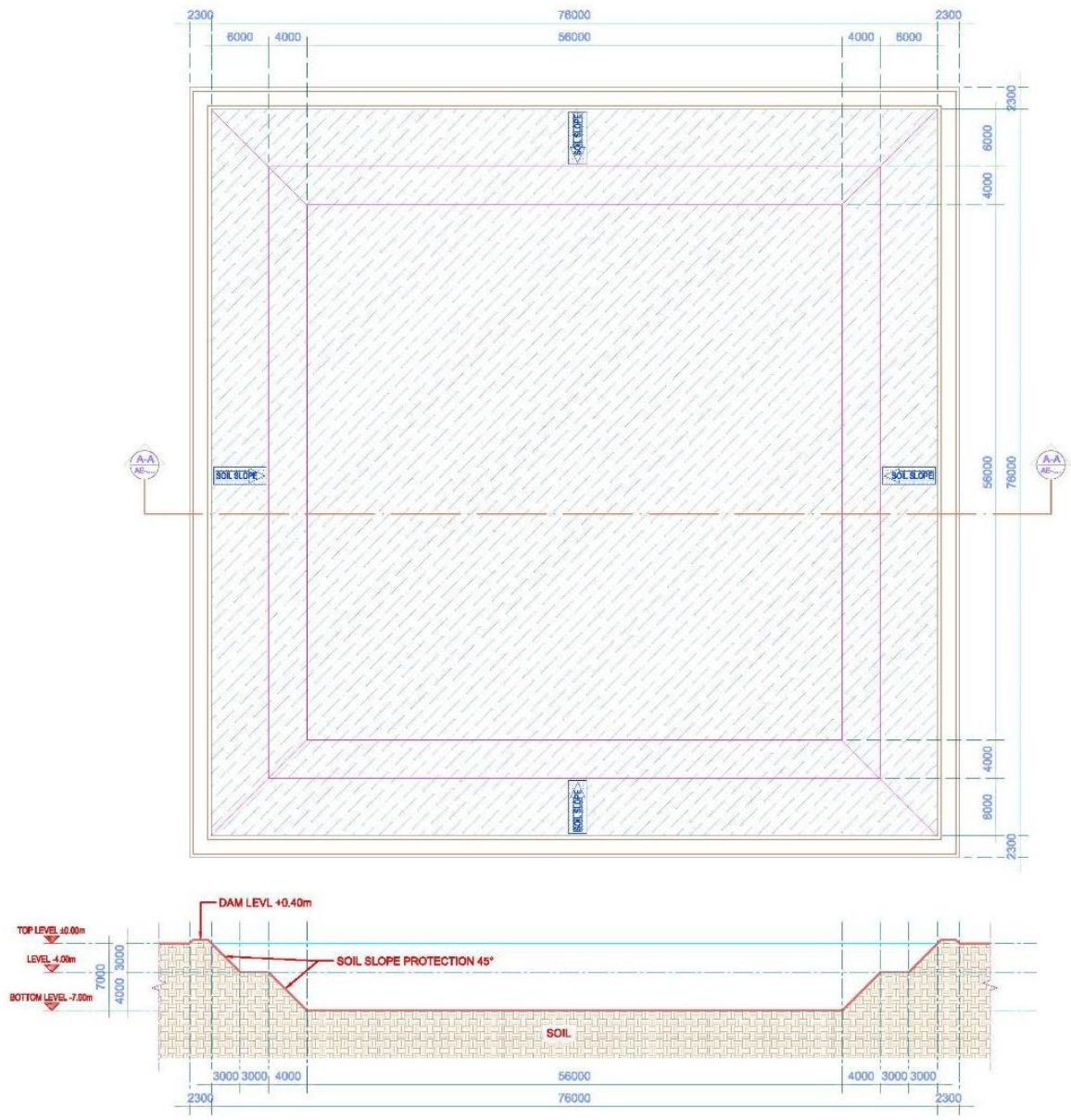
ប្លង់មើលឆ្វេង
មាត្រដ្ឋាន: 1:20



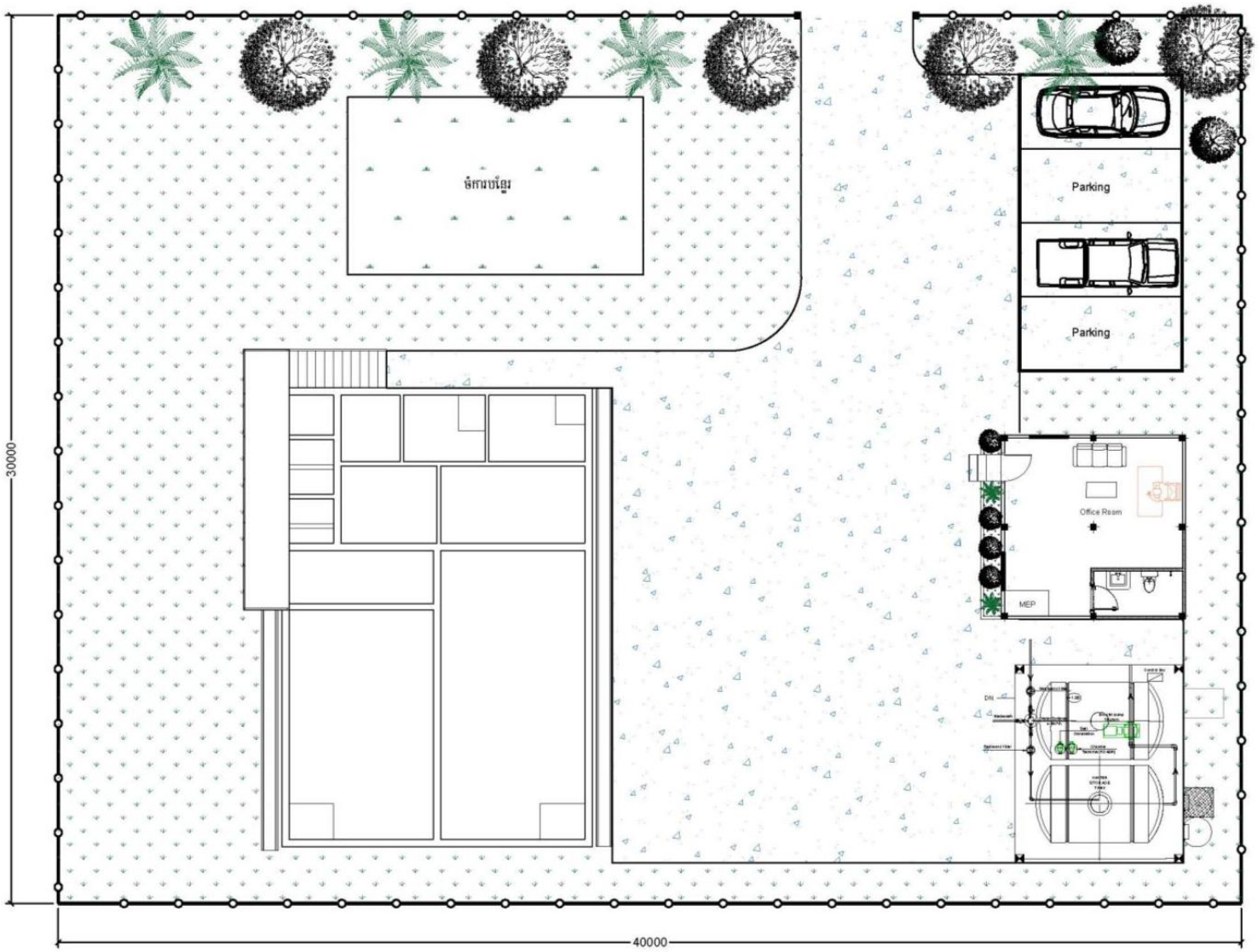
ប្លង់ពុះ 1−1
មាត្រដ្ឋាន: 1:30

Annex C: Water Tower 15m height using to elevate the clean water tank in all sites

Annex D: Typical drawing of new pond excavation



Annex E: . Layout plan of clean water treatment & supply system



Annex F: Manager's Code of Conduct for Firm or Contractor

Manager's Code of Conduct for Firm or Contractor

I. Manager's Code of Conduct

The contractor is committed to ensuring that the project is implemented to minimize any negative impacts on the local environment, communities, and workers. This will be done by respecting the environmental, social, health and safety (ESHS) standards and ensuring appropriate occupational health and safety (OHS) standards are met. The contractor is also committed to creating and maintaining an environment where children under the age of 18 will be protected, and where sexual abuse and sexual harassment have no place. Improper actions towards children, Violence against Children (VAC), and/or Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) will not be tolerated by any employee, sub-contractors, supplier, associate, or representative of the company.

Staff at all levels have a responsibility to uphold the contractor's commitment. Contractors need to support and promote the implementation of the Code of Conduct. To that end, staff must adhere to this Code of Conduct and also sign the Workers' Code of Conduct. This commits them to supporting the implementation of the Contractor's Environmental and Social Management Plan, and the OHS Management Plan, and developing systems that facilitate the implementation of the SEA/SH Action Plan.

Staff, in particular Managers, need to maintain a safe workplace, as well as a SEA/SH-free environment at the workplace and in the local community.

II. Implementation

1. To ensure maximum effectiveness of the Code of Conduct:

(i) Prominently displaying the Code of Conduct in clear view at workers' camps, offices, and in public areas of the workspace. Examples of areas include waiting, rest and lobby areas of sites, and canteen areas.

(ii) Ensuring all posted and distributed copies of the Code of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.

2. Verbally and in writing explain the Code of Conduct to all staff, including in an initial training session

3. Ensure that:

(i) All staff sign the 'Workers' Code of Conduct, including an acknowledgement that they have read and agree with the Code of Conduct.

(ii) Staff lists and signed copies of the Workers' Code of Conduct are provided to the OHS Manager and the MLMUPC/MAFF E&S Unit.

(iii) Participate in training and ensure that staff also participate as outlined below

(iv) Put in place a mechanism for staff to:

- report concerns on ESHS or OHS compliance; and
- Confidential report SEA/SH incidents through the Grievance Redress Mechanism.

4. Ensure that when engaging in partnership, sub-contractor, supplier or similar agreements, these agreements:

   (i) Incorporate reference checks for all employees where the works are taking place

   (ii) The ESHS, OHS, SEA/SH, and VAC Codes of Conduct as an attachment.

   (iii) Include the appropriate language requiring such contracting entities and individuals, and their employees and volunteers, to comply with the Workers' Codes of Conduct.

   (iv) Expressly state that the failure of those entities or individuals, as appropriate, to ensure compliance with the ESHS and OHS standards, take preventive measures Against SEA/SH and VAC, to investigate allegations thereof, or to take corrective actions when SEA/SH or VAC has occurred, shall not only constitute grounds for sanctions and penalties under the Workers' Codes of Conduct but also termination of agreements to work on or supply the project.

5. Provide support and resources to the E&S team to create and disseminate staff training and awareness-raising strategy on SEA/SH, VAC and other issues highlighted in the ESMP.

6. Ensure that any SEA/SH or VAC complaint warranting Police action is reported to the Police, the Provincial and National level of LASED III immediately.

7. Report and act by the agreed response protocol any suspected or actual acts of SEA/SH or VAC.

8. Ensure that any major ESHS or OHS incidents are reported to the Provincial and National level of LASED III and the supervision engineer immediately, non-major issues by the agreed reporting protocol.

9. Ensure that children under the age of 18 are not present at the construction site or engaged in any hazardous activities.

III. Training

10. The managers are responsible to

    (i) Ensure that the OHS Management Plan is implemented, with suitable training required for all staff, including sub-contractors and suppliers; and

    (ii) Ensure that staff have a suitable understanding of the ESMP and are trained as appropriate to implement the Contractor's ESMP requirements.

11. All managers are required to attend an induction manager training course before commencing work on-site to ensure that they are familiar with their roles and responsibilities in upholding the SEA/SH and VAC elements of these Codes of Conduct. This training will be separate from the induction training course required of all employees and will provide managers with the necessary understanding and technical support needed to begin to develop the SEA/SH Action Plan for addressing SEA/SH issues.

12. Managers are required to attend and assist with the project facilitated training courses for all employees.

13. Ensure that time is provided during work hours and that staff prior to commencing work on site attend the mandatory project facilitated induction training on:

    (i) OHS and ESHS, and

(ii) SEA/SH and VAC

14. During civil works, ensure that staff attend ongoing OHS and ESHS training, as well as the monthly mandatory refresher training course required of all employees on SEA/SH.

IV. Response

15. Managers will be required to take appropriate actions to address any ESHS or OHS incidents)

16. Regarding SEA/SH

(i) Maintain the confidentiality of all employees who report or (allegedly) perpetrate incidences of SEA/SH (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law)

(ii) If a manager develops concerns or suspicions regarding any form of SEA/SH by one of his/her direct reports or by an employee working for another contractor on the same work site, s/he is required to report the case using the GRM.

(iii) Once a sanction has been determined by the GRM, the relevant manager(s) is/are expected to be personally responsible for ensuring that the measure is effectively enforced within a maximum timeframe of 14 days from the date the GRM decided to sanction.

(iv) If a Manager has a conflict of interest due to personal or familial relationships with the survivor and/or perpetrator, he/she must notify the Company and the GRM. The Company must appoint another manager without a conflict of interest to respond to complaints.

(v) Ensure that any SEA/SH issue warranting Police action is reported to the Police, the client, and the World Bank immediately.

17. Managers failing to address ESHS or OHS incidents or report or comply with the SEA/SH provisions may be subject to disciplinary measures, which the Company will determine and enact. Those measures may include:

(i) Verbal warning;

(ii) Formal warning;

(iii) Additional Training;

(iv) Loss of up to one week's salary);

(v) Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months)

(vi) Termination of employment

18. Ultimately, failure to effectively respond to ESHS, OHS, VAC and SEA/SH cases on the work site by the company's managers may provide grounds for legal action by authorities.

I acknowledge that I have read the Code of Conduct, agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, VAC and SEA/SH requirements. I understand that any action inconsistent with this Code of Conduct or failure to act mandated by this Code of Conduct may result in disciplinary action.

Signature : .....

Name : .....

Title : .....

Date : .....

Annex G: Workers' Code of Conduct

Workers' Code of Conduct

I, ……..., acknowledge that adhering to environmental, social, health, and safety (ESHS) standards, following the project's occupational health and safety (OHS) requirements, and preventing Sexual Exploitation Abuse (SEA)/Sexual Harassment (SH) are important.

The Contractor considers that failure to follow ESHS and OHS standards or to partake in activities constituting SEA and SH be it on the work site, the work site surroundings, at workers' camps, or the surrounding communities—constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. Prosecution by the Police of those who commit VAC, SEA/SH may be pursued if appropriate.

I agree that while working on the project I will

1) Carry out my duties competently and diligently)

2) Comply with this Code of Conduct and all applicable laws and regulations, including requirements to protect the health, safety, and well-being of other Contractor's Personnel and any other person.

3) Maintain a safe working environment, including by

- Ensure that workplaces, machinery, equipment, and processes under each of my control are safe and without health risk.
- Follow applicable emergency operating procedures.
- Report work situations that I believe are not safe or healthy and remove myself from a work situation which I reasonably believe presents an imminent and danger to my life or health.
- Consent to a background check in any place I have worked for more than six months
- Attend and actively partake in training courses related to ESHS, OHS, VAC, and SEA/SH as requested by my employer
- Will wear my protective equipment (PPE) at all times when at the work site
- Take all practical steps to implement the environmental and social management plan (ESMP).
- Implement the OHS Management Plan
- Adhere to a zero-alcohol policy during work activities, and refrain from the use of narcotics or other substances which can impair faculties at all times.
- Treat women, children (persons under 18 years old), and men with respect regardless of race, colour, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
- Not use language or behaviour towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- Not sexually exploit or abuse project beneficiaries and members of the surrounding communities
- Not engage in sexual harassment of work personnel and staff —for instance, making unwelcome sexual advances, requests for sexual favours, and other

verbal or physical conduct of a sexual nature is prohibited: i.e. looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; in some instances, giving personal gifts.

- Not engage in sexual favors for instance, making promises of favorable treatment (i.e. promotion), threats of unfavorable treatment (i.e. loss of job) or payments in kind or cash, dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior.
- Not use prostitution in any form at any time
- Not participate in sexual contact or activity with children under the age of 18—including grooming or contact through digital media. Consent from the child is also not a defense or excuse.
- Unless there is full consent[1] by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex (including prostitution). Such sexual activity is considered "non-consensual" within the scope of this code.
- Consider reporting through the GRM or to my manager any suspected or actual SEA/SH by a fellow worker, whether employed by my company or not or any breaches of this Code of Conduct.
- Complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including health and safety matters, Sexual Exploitation, and Sexual Assault (SEA)
- Report violations of this Code of Conduct.

4) With respect to children under 18 years old)

- Bring to the attention of my manager the presence of any children on the construction site or engaged in hazardous activities.
- Wherever possible, ensure that another adult is present when working in the proximity of children.
  - I do not invite unaccompanied children unrelated to my family into my home unless they are at immediate risk of injury or in physical danger.
  - Do not use any computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography (see also "Use of children's images for work-related purposes" below
  - Refrain from physical punishment or discipline of children
  - No hiring of children for any LASED III project activity (no persons under the age of 18)
  - Comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's safeguard policies on child labor and minimum age.
  - Take appropriate caution when photographing or filming children (see #5 below). Photos or films of children should generally not be taken in the LASED III, except in instances showing the benefits or impacts of road works, such as impacts to schools or school safety trainings.

5) Use of children's images for work-related purposes)

When photographing or filming a child for work-related purposes, I must

- Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images.
- Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this, I must explain how the photograph or film will be used.
- Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
- Ensure images are honest representations of the context and the facts)
- Ensure file labels do not reveal identifying information about a child when sending images electronically.

6) Raising Concerns

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct or that otherwise concerned should raise the issue promptly. This can be done within the grievance mechanism or directly reported to the site manager or LASED III at the sub-nation and national level.

7) Sanctions

I understand that if I breach this Workers' Code of Conduct, my employer will take disciplinary action, which could include:

- Informal warning)
- Formal warning)
- Additional Training
- Loss of up to one week's salary)
- Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months
- Termination of employment
- Report to the Police

I understand that I must ensure that the environmental, social, health and safety standards are met. I will adhere to the occupational health and safety management plan. I will avoid actions or behaviors that could be construed as VAC or SEA/SH. Any such actions will breach this Workers' Code of Conduct. I acknowledge that I have read the foregoing Workers' Code of Conduct, agree to comply with the standards, and understand my roles and responsibilities to prevent and respond to ESHS, OHS, VAC, and SEA/SH issues. I understand that any action inconsistent with this Workers' Code of Conduct or failure to act mandated by this Workers' Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature : .....

Name : .....

Title : .....

Date : .....