Project Number: 56189-001 October 2022

Philippines: Tiger Digital Infrastructure for Rural Connectivity Project

Prepared by Tiger as a requirement of the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 19 October 2022)

Currency unit	_	Philippine Peso (PHP)
PHP1.00	=	\$ 0.017
\$1.00	=	PHP 58.84

NOTES

- (i) The fiscal year (FY) of Tiger Infrastructure Philippines Inc. ends on 31 December.
- (ii) In this report, "\$" refers to United States dollars.

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Tiger Infrastructure Philippines, Inc.

PHI: Tiger Digital Infrastructure for Rural Connectivity Project October 2022



Executive summary

The consultant was commissioned by Tiger Infrastructure Philippines, Inc. ("TIPI" or the "Proponent") and the Asian Development Bank ("ADB" or the "Lenders") to conduct the Environmental and Social Compliance Audit ("ESCA" or the "Assessment") of the TIPI Telecommunications Towers Project (the "Project").

The project, for which ADB is considering providing corporate financing, involves the development, construction, and operation of *[INFORMATION REDACTED]*¹ built-to-suit steel telecommunications towers in underserved areas in the Visayas and Mindanao.

The overall objective of the ESCA is to provide an independent and objective assessment of the potential environmental and social (E&S) issues associated with the Project development against the applicable local and international standards. Of the *[INFORMATION REDACTED]* sites, site visits were conducted to eleven (11) of these tower locations. However, the sites that were not visited *[INFORMATION REDACTED]* were still comprehensively assessed based on constraints analysis using GIS, review of site list description and documentation from TIPI, review of lessor proof of ownership and relevant documents, and through interviews with SAQ coordinator.

Site visit for rapid environmental assessment and socio-economic survey was also carried out in general guidance with the ADB SPS Requirements and local regulatory requirements in the Philippines. The identified risks and concerns raised during the Rapid Site Assessment were generally concerning noise and vibration impacts and site access for the sites. Other potential issues relate to biodiversity (such as tree cutting and bird pathways), hazards (such as flooding and earthquakes), and safety.

On the [INFORMATION REDACTED] sites, a high-level social impact assessment was conducted in line with the environmental social compliance audit.

For the corporate ESMS audit, it was determined that the HSE policy currently serves as the ESMS and is focused on occupational health and safety. Responsibilities for drafting of the HSSE and its implementation, site screening and selection, and accomplishment of local permits necessary for construction and commissioning are delegated to the turn-key EPC and SAQ contractors. As these permits do not require monitoring and reporting, there are no processes for E&S monitoring and reporting and no dedicated E&S staff to oversee the compliance of TIPI and contractors to environmental regulations and permitting requirements. The E&S capability should be integrated in the organization. Development and enhancement of a complete ESMS is recommended to ensure compliance to environmental regulations and the ADB safeguards. The ESMS should be communicated to contractors and its compliance integrated in contractor agreements. Site selection, though delegated to contractor, considers environmental criteria such as topography, site accessibility and lack of obstructions, absence of or low susceptibility to flooding, suitable soil quality, and within design wind speed limits. While these criteria are sufficient, it is recommended in the corrective actions that a project screening and constraints analysis be conducted per batch of towers to determine potential overlaps with environmentally critical areas. Areas with potential overlaps can be avoided or more detailed environmental impact assessments be conducted should there be no alternative options. As site conditions and environmental risks cannot be determined completely from the DDD, succeeding sites should undergo initial environmental assessment following the EARF.

For the social compliance audit, it was determined that most of the stakeholders are 50 years old and above. Some of the stakeholders belong to Indigenous Peoples (IP) groups, although only one (1) site is located within a CADT. The rest of the IP stakeholders are migrant IPs from other locations within Mindanao. In terms of the use of the land, most of the sites are in idle land meant for passive income and near residential areas. The sites were accessible via paved roads or all-weather roads connected to paved Barangay or Municipal roads. As the site acquisition, lease negotiations, and consultations are delegated to the SAQ coordinator and local contractors, there is no pre SAQ site due diligence or screening, formal stakeholder engagement process and grievance redress mechanism in place for external stakeholders. These mechanisms are recommended to be included in the corrective actions. A significant finding for the social compliance audit is that the remuneration regarding the lease are uniform for all sites despite differences in land use, location, and valuation. One site is

¹This information has been removed as it falls within the exceptions to disclosure as specified in para 17(v) of ADB's Access to Information Policy.

located within an ancestral domain and the tenurial instrument with regards to the CADT overlap was not well documented. Since site was not screened for land classification and tenurial issues in the SAQ process, the lease agreement was finalized without the conduct of the FPIC process.

The creation of a comprehensive ESMS must be done prior to construction, including management plans identified in this report, as well as the delineation of responsibilities between TIPI, the MNO, and the EPC Contractor. Although most of the responsibilities are with the EPC contractor, TIPI should have their own corporate plans as well as a full-time internal HSSE Officer, apart from EPC contractor and MNO, that will be responsible for the Project's compliance with ADB requirements.

Identified gaps or issues are proposed to be addressed through a Corrective Action Plan (CAP) to be agreed by all parties as a condition to financing.

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Acronyms and abbreviations

ADB	Asian Development Bank
ADB SPS	ADB Safeguard Policy Statement
ASDPP	Ancestral Domain Sustainable Development & Protection Plan
BESO	Barangay Employment Service Office
CADC	Certificate of Ancestral Domain Claim
CADT	Certificate of Ancestral Domain Title
CALC	Certificate of Ancestral Land Claim
CAP	Corrective Action Plan
CSR	Corporate Social Responsibility
DAO	Department Administrative Order
DDD	Detailed Design Drawing
DENR	Department of Environment and Natural Resources
DOLE	Department of Labor and Employment
E&S	Environmental and Social
ESCA	Environmental and Social Compliance Audit
ESMP	Environmental and Social Management Plan
ESMMP	Environmental and Social Management and Monitoring Plan
ESMS	Environmental and Social Management Systems
EHS	Environmental, Health, and Safety
FPIC	Free, Prior and Informed Consent
GRM	Grievance Redress Mechanism
H&S	Health and Safety
HR	Human Resources
HSSE	Health, Safety, Security, and Environment
ICC	Indigenous Cultural Communities
IEE	Initial Environmental Evaluation
IFC	International Finance Corporation
ILO	International Labour Organization
IP	Indigenous Peoples
IPRA	Indigenous Peoples Rights Act
IR	Involuntary Resettlement
МС	Memorandum Circular

MLA	Master Lease Agreement
MNO	Mobile Network Operator
NPCC	National Pollution Control Commission
OHS	Occupational Health and Safety
PD	Presidential Decree
PESO	Public Employment Service Office
RA	Republic Act
REA	Rapid Environmental Assessment
SAQ	Site Acquisition
SEP	Stakeholder Engagement Plan
TIPI	Tiger Infrastructure Philippines, Inc.
TSSR	Technical Site Selection Review
WB	World Bank
ZO	Zoning Ordinance

1. Introduction

1.1 Background

Tiger Infrastructure Philippines, Inc. (TIPI or the Proponent) aims to develop, construct, operate, and maintain steel telecommunications towers within Visayas and Mindanao in the Philippines (the "Project"). TIPI has signed a co-location Master Lease Agreement (MLA) with Mobile Network Operator (MNO) and is seeking MLAs with other mobile network operators in the country to co-locate their towers. Currently, TIPI has confirmed *[INFORMATION REDACTED]* sites while the location of the rest of the towers is still to be determined. All sites will be leased.

TIPI is seeking project financing from Asian Development Bank (ADB or the Lender). To support the environmental and social due diligence for the Project, TIPI commissioned a consultant to conduct an audit of TIPI's corporate Environmental and Social Management System (ESMS) and the social compliance audit of the *[INFORMATION REDACTED]* sites against ADB SPS and other applicable reference frameworks. These audits will be referred to as ESCA in this report. At the same time, an Initial Environmental Examination (IEE), which is a separate document from this report, needs to be conducted to validate the present environmental and social conditions of the tower locations before construction and assess potential E&S impacts of the project. Results of the IEE and impacts assessment aims to help TIPI formulate an Environmental and Social Management Plan (ESMP) that includes mitigants for adverse environmental impacts and enhancement measures for project beneficial effects during the construction and operations phases.

1.2 Objectives

The objectives are grouped into two:

- a) to provide corporate audit of the TIPI's Environmental and Social Management Systems such as to:
- Assess the capacity of TIPI to manage all relevant environmental and social impacts and risks of its businesses, operations and the proposed project, particularly the issues identified in the SPS Safeguard Requirements 1-3 and other applicable reference frameworks;
- Assess TIPI's compliance with the applicable national and local laws and regulations of the jurisdiction in which the subprojects operate that pertain to environmental and social matters, including those laws implementing the Philippine Government's obligations under international law;
- Assess TIPI' human resource and gender policies and practices and its compliance with national labor laws and international core labor standards;
- Identify TIPI's main stakeholder groups and current stakeholder engagement activities;

and b) to provide ESCA of TIPI's existing facilities based on the terms of references such as to:

- Assess the social conditions at the proposed tower sites including land use, classification, and tenure; natural hazards; water resources; physical resources; socioeconomics, historical and cultural values, and other relevant social aspects and risks;
- Verify there will be no physical and/or economic displacement within the proposed tower site locations;
- Assess TIPI's social compliance in corporate policies, site selection, land acquisition, human resource practices and policies, contractor management, labor, stakeholder engagement, human rights, and other aspects of project development and implementation;
- Assist TIPI in improving their corporate ESMS and provide guidance in implementation through gaps analysis, recommendation of corrective actions, and capacity building.

Identified gaps or issues are proposed to be addressed through a Corrective Action Plan (CAP) to be agreed by all parties as a condition to financing.

1.3 Approach

This ESCA was conducted through desktop E&S review, documents review, site visit, interviews, analysis (including constraints analysis), and reporting. The following sections provide the details of the analysis and approaches conducted.

1.3.1 Documents Review

The consultant requested a list of documents from TIPI to understand the Project's status and E&S performance prior to the site visit in order to prioritize and follow up with potential E&S issues. Due to time constraints and availability of documents during the site visit, the consultant also issued a follow up to TIPI post site visit, as well as through an interview with TIPI and the EPC contractor, along with additional information and documents relevant to the issues identified during the site visit.

The consultant conducted a desktop review of the following documents from TIPI:

- Existing Environmental and Social Management Systems (ESMS), including environmental and social management and monitoring plans (ESMMP)
- Environmental and Social impacts/aspects registers
- Land negotiation and Acquisition procedures
- Human Resource (HR) policies and Labor practices
- Gender and Development initiatives,
- Corporate Social Responsibility (CSR)
- Environmental, Health and Safety (EHS) policies
- Relevant Environmental Permits,
- Social approvals
- Detailed Design Drawing Check List
- Preliminary telco tower design and construction methodology
- Engineering design codes or standards
- Quality Management System
- Sample Subcontractor Local Supplier Agreement
- Supplier Accreditation Process

1.3.2 Site Visit and Interviews

In addition to document review, the consultant conducted online and in-person interviews with TIPI's EHS Lead or representative, HR, community relations officer or representative, and land acquisition team on environmental and social issues and the corresponding management and mitigation applied. The consultant also reviewed TIPI's current level of performance against the ADB Safeguard Policy Statement (ADB SPS) in respect to existing facilities/activities and land acquisition performed to date.

1.3.2.1 Site Visit

The site visit was conducted from 14th to 19th of September 2022 by the consultant's team. **Table 1-1** provides the list of participants during the site visit.

Table 1-1. List of Participants	
Participants	Roles and Responsibilities
Norelyn Caneo	TIPI's Site Acquisition Coordinator
Reainjun Ramos	TIPI's Project Manager
Marjon Calderon	Local SAQ Contractor
Elmer Zurbano	Local SAQ Contractor

Table 1-1.List of Participants

The following activities were carried out by the consultant's team prior to and during the site visit:

- Site orientation: Discussion with TIPI to get an overview of the Projects progress, understand activities to be taken during the site visit, and agree on the site visit agenda.
- Rapid E&S Assessment: Rapid E&S assessment was conducted using ADB's Rapid Environmental Assessment (REA) and photo documentation
- Interview with lessors and government officials: The interview was conducted on site. The aim of the interview was to discuss E&S and clarify issues about land acquisition and environmental assessment.

1.3.2.2 Interviews

1.3.2.2.1 Interviews with the Local Government Units

In parallel with the site visit, interviews were also conducted with some local government units (e.g. Barangay and Municipal level offices). Point of discussion includes socio-economic profiling of the community of the site, local requirements, and any historical issues in the site area. The local NCIP was also visited for sites within CADT to discuss responsibilities, process needed to be undertaken and precedence of telecommunication projects in the area.

1.3.2.2.2 Interview with the EPC Contractor

Following the site visit, on the 21st of September 2022, the consultant conducted an interview with TIPI representatives including Mr. Ioannis Voutyraki (Operations Director), Mr. Kay Seah (Managing Director – Philippines), Mr. Joey Soralla (General Manager), Ms. Norelyn Caneo (Site Acquisition Coordinator), and Mr. Reianjun Ramos (Project Manager); and the *[INFORMATION REDACTED]*, TIPI's EPC Contractor attended by two representatives. The meeting was held at the TIPI's office located at the 5th floor Diamond Hotel, Roxas Boulevard corner Dr. J. Quintos Street, Manila. Points of discussion included the introductions to the EPC, presentation of the construction methodology, the DDD checklist, the site selection process, and discussion of the quality management system (which is actually the construction method and list of engineering codes and standards), sample HSSE documentation, hiring policy for locals, and other relevant technical and HSSE concerns.

1.3.3 Analysis and Reporting

The report documents the activities presented above and describes the Project potential E&S issues, gaps and risks against the applicable standards identified during the Assessment. The consultant also conducted a constraints analysis using ArcGIS to conduct location screening for each of the tower sites/clusters according to significant landforms located adjacent or within landforms or protected areas declared by the Department of Environment and Natural Resources (DENR) through its online portal www.geoportal.gov.ph. A summary of the results of this analysis is presented in the succeeding sections.

1.4 Limitations

The Assessment has been conducted in accordance with TIPI's agreement with ADB. This is in line with the scope of work guided by the approach as discussed in the previous sections. The consultant cannot guarantee that these activities necessarily yield complete information. To the extent that the services require judgement, there can be no assurance that fully definitive or desired results are obtained, or if any results are obtained, that they are supportive of any given course of action. The services may include the application of judgement to scientific principles, to that extent; certain results of this work may also be based on subjective interpretation.

Key limitations of the Assessment are listed as follows:

- Only 11 of the [INFORMATION REDACTED] confirmed TIPI Sites were visited during the site visit.
 - During the site visit activity, the lot owners for three of the sites were not available, and these sites could not be assessed at that time. In the absence of information from the site visit, the sites were assessed through the constraints analysis, satellite imagery, phone interview, and secondary data from TIPI. The secondary data consisted of the site-specific documents (e.g. TSSR, Lessors Information Sheet, etc.), as well as extensive photos of the site taken during the SAQ process.
- The ESCA did not include the detailed assessment of the alternatives for each site location

1.5 Applicable Standards

The ESCA is conducted based on the applicable standards presented in Table 1-2.

	Applicable standards	Description
National Standards	RA 8371 Indigenous People's Rights Act of 1997 (IPRA)	An act to recognize, protect and promote the rights of indigenous cultural communities/indigenous peoples.
	RA 9147 Wildlife Resources Conservation and Protection Act (2001) and its IRR (DAO 2019-05)	An Act providing for the conservation and protection of wildlife resources and their habitats, appropriating funds therefor and for other purposes.
	RA 7586 National Integrated Protected Areas System and its IRR (DAO 2019- 05)	An Act providing for the establishment and management of national integrated protected areas system, defining its scope and coverage, and for other purposes.
	RA 11038 Expanded National Integrated Network of Protected Areas System Act of 2018	An act providing a more extensive protection and effective preservation of the remaining protected areas in the country
	RA 8749 Clean Air Act and its Implementing Rules and Regulations (IRR) DENR Administrative Order (DAO) 2000-81	Defines the requirements for generators/back up power permitting post ECC and the thresholds for emissions monitoring
	NPCC MC 1980-02 Ambient Noise Standards	Defines the requirements and restrictions on noise level and control.
	RA 9275 Clean Water Act and its IRR DAO 2005-10	Defines the requirements for water use and discharge permitting and thresholds for effluent water quality
	RA 9003 Ecological Solid Waste Management Act	Defines appropriate solid waste management practices for local projects.
	PD 705 Revised Forestry Code of the Philippines	Lays down the basic principles of forest management and conservation, makes provision for the administration of forestry, the survey and

	Applicable standards	Description
		classification of lands for purposes of forestry, and the use of forest resources.
	PD 1586 Philippine Environmental Impact Statement (PEIS) System and its	These laws provide guidelines on the Philippine Environmental Impact Statement System (PEISS).
	IRR DAO 2003-30 DENR Environmental Management Bureau (EMB) Memorandum Circular (MC) 2014-005 DAO 2017-015 Guidelines on Public Participation under the Philippine Environmental Impact Statement (PEIS) System	PD 1586 defines process and documents required to secure the ECC which is, in turn, a prerequisite for construction of facilities in the Philippines
		EMB MC defines the project category and its corresponding report requirements to secure the ECC
		DAO 2017-015 defines levels of consultations and local social approvals relevant to the ECC
	RA 6969 Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990	An act to control toxic substances and hazardous and nuclear wastes, providing penalties for violations thereof, and for other purposes
	DAO 1992-29	The Implementing Rules and Regulations of Republic Act 6969
	DA0-2014-02 Revised PCO Accreditation Guidelines	Accreditation of PCOs based on the categorization of establishments
	EMB MC-2019-004 Advanced Training Modules for Pollution Control Officers	Sets additional trainings required for renewal of PCO accreditation
	RA 11058 Occupational Safety and Health Standards	An act providing rules that each Filipino worker is protected against injury, sickness or death through safe and healthful working conditions and that employers must promote strict but dynamic, inclusive, and gender-sensitive measures in the formulation and implementation of policies and programs related to occupational safety and health.
	ILO Convention No. 169 Indigenous and Tribal Peoples Convention, 1989	ILO Convention No. 169 is grounded on the recognition of indigenous peoples' aspirations to exercise control over their own institutions, ways of life and economic development and to maintain and develop their identities, languages and religions, within the framework of the States in which they live.
International Standards	ADB SPS 2009;	The Safeguard Policy Statement (SPS) builds upon the three previous safeguard policies on the environment, involuntary resettlement, and indigenous peoples, and brings them into one single policy that enhances consistency and coherence, and more comprehensively addresses environmental and social impacts and risks.
	ADB Social Protection Strategy (2001)	The Social Protection Strategy (2001) defines social protection as a set of policies and programs designed to reduce poverty and vulnerability by promoting efficient labor markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income.

Applicable standards	Description
ADB Gender and Development Policy (1998);	Gender and Development Policy (1998) adopts mainstreaming as a key strategy in promoting gender equity.
ADB Access to Information Policy (2018);	The Access to Information Policy (2018) contains principles and exceptions to information sharing with external stakeholders.
World Bank Group Environmental (WBG), General Health and Safety (EHS) Guidelines (April 30, 2007)	The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP) and are referred to in the World Bank's Environmental and Social Framework and in IFC's Performance Standards.
World Bank Group (WBG) General EHS Guidelines (2007), WBG EHS Guidelines for Telecommunications (2007)	The EHS Guidelines for Telecommunications are applicable to telecommunications infrastructure such as fixed line and wireless voice and data transmission infrastructure, including long distance terrestrial and submarine cables (e.g., fiber optic cables), as well as radio and television broadcasting, and associated telecommunications and broadcasting installations and equipment.

2. Project Description

The project, for which ADB is considering in providing financing, involves the development, construction, operation, and maintenance of steel telecommunications towers in underserved areas in the Visayas and Mindanao.

[INFORMATION REDACTED] of these tower locations were confirmed by TIPI, and site visits were conducted on the eleven (11) of these tower locations. For the towers that were not visited, information was based on documents review, site photographs, interviews from TIPI and the EPC contractor, and the constraints analysis conducted for these sites. The locations of each of the *[INFORMATION REDACTED]* tower site is further described in the succeeding subsections.

2.1 **Project Location**

The locations of the towers are in underserved areas in the Islands of Mindanao, Philippines. The locations of the towers are presented in **Table 2-1** and **Figure 2-1**.

 Table 2-1.
 Locations of the Telecommunications Towers

[INFORMATION REDACTED]

Figure 2-1. The Project Location

[INFORMATION REDACTED]

2.2 Project Organizational Structure and Background

Tiger Infrastructure Group is an integrated telecommunication infrastructure services company and primarily engages in operation and management of wireless telecommunication towers. Tiger's sponsors are Cell Tower Services Pte Ltd (CTSI) and Daily Life Renewable Energy (83% by CTSI and 17% by DLRE respectively). Both CTSI and DLRE have strong technical and industry experience in the tower industry and related power management space. CTSI is well-established in the telecommunications towers business internationally while DLRE offers a full suite of integrated customized design, engineering, procurement, construction, installation, and commissioning services for renewable energy across the Asia-Pacific. The Tiger's corporate structure comprises of TIPI, an entity headquartered in Roxas Boulevard, Corner of Dr. J. Quintos Street, Room 501, Diamond Hotel, Malate, NCR, Manila, Philippines and held through holding companies based in Singapore. TIPI was established in February 2020 with a view to acquiring and rolling out build-to-suit towers after acquiring an Independent Tower Company (ITC) license. The organizational structure of TIPI is composed of the following personnel.

[INFORMATION REDACTED]

Name	Designation
Kay Seah	Managing Director
Joey Sorallo	General Manager
Wirote Trabwongwitaya	Director of International Operations
Ioannis Voutirakis	Operations Director
Adelaida Lat	Finance Director
Enrico Ablaza Domingo	Business Development Director
Reianjun Ramos	Project Manager
Mario Ebanks	Project Planning Lead
Norelyn Caneo	Site Acquisition Coordinator

Table 2-2. Key TIPI Officials

Currently, Mr. Reianjun Ramos is the Project Manager. However, as more sites will be rolled out, TIPI will hire more Project Managers to support the project.

Local contractors were also engaged by TIPI to conduct the SAQ process for the other sites, including the *[INFORMATION REDACTED]* sites that were assessed in this report. The local contractors are responsible for finding possible lots for the Project, as well as coordinating and negotiating with the lessors throughout the SAQ process.

There will be a designated Engineering, Procurement and Construction (EPC) contractor for the project and is registered in the Philippines and is engaged in providing telecommunications infrastructure services.

2.3 Project Components, Setting, and Site Access

The steel communications towers planned for this Project are comparable with a generic ground-based tower (GBT). The key specifications of a GBT are provided in **Table 2-3**.

Ground Based Tower (GBT)			
Description	Conventional		
	 Designed with strong frame which is able to hold the wind pressure and geographic condition at the area where the tower will be built 		
	Built on the ground		
Height	42m		
Basic Design and Wind Speed	290 kph, 320kph		

Table 2-3.Ground-Based Tower Key Specifications

The general tower layout is provided in **Figure 2-2**. Each of the tower site is comprised primarily of the antenna, tower structure, equipment, generator, and fencing. The key components and specifications are provided in **Table 2-4**.

Components	Key Specifications
Antenna	Typically, with diameter of 1.2 m and installed on the head frame of the tower
Tower	The tower structure has a height of approximately 42 m and base of 4.5 by 4.5 m The tower also has a ladder for installation, inspection, and maintenance of the antenna.
Equipment	The equipment on telecommunication towers includes transceivers and other supporting technology. These are installed in the equipment pad. The installation and operation of the equipment is under the MNO's scope of work.
Test pit	Test pit is installed near the equipment pad
KwH meter	Measures the amount of electricity consumed by the operation of the telecommunication tower
Generator	The generator set is set on the generator set pad
Fence	The fence includes concrete fence, cyclone wire fence, perimeter light, service entrance and a gateway.

Table 2-4.Project Components and Key Specifications

The operation of telecommunication is simple. Electromagnetic radio waves, called a radio frequency, that is emitted by cellphones when used are received by the antenna attached to the top of the telecommunication tower. The telecommunication tower can be unmanned. There is no constant human, mechanical or chemical activity required in the tower site.

The only activities required for the operation of the telecommunication tower involves securing the tower components; maintenance and inspection; and activation of generator sets during brownouts.

A staging and storage area near to the construction site will be established as a temporary area designated for storage of equipment, materials, stockpiles, vehicles, and other construction materials. A separate temporary pool or formwork bin will be created for the mixing of concrete to avoid affecting the soil directly. Although the locations for the staging and/or laydown are not yet available, a discussion on the possible locations is in Section 3.4.

As part of the site selection process, site accessibility is taken into consideration when looking for candidate lots/sites. Due to this, all *[INFORMATION REDACTED]* sites are accessible through from the main road and barangay roads. The access roads leading to site range from paved to dirt cover and are accessible by vehicles and heavy equipment. Most access roads are shared with other users from the community. Further description and photo-documentation of site access are shown in Section 3.4.

Figure 2-2. General Tower Lay-out

[INFORMATION REDACTED]

2.4 Project Construction Methodology

This section presents the construction methods, manpower, list of equipment and materials, the quality of the materials to be used and the requirements to meet prior, during and after the tower installation.

2.4.1 Overview of Construction Methods

The construction methodology shows the standard tools and equipment used during the construction and installation of the tower. The TIPI, EPC contractor, information and communications specialist engineers, HSSE officer and project manager should take a kick-off and toolbox meeting prior the construction to finalize the mobilization, commencement matters and check the quality and quantity of materials and methods to be used. The construction methods include earthworks, excavation, foundation pit construction and support, cushion formworks, pouring, reinforcement, backfilling, tower installation and foot encapsulation, lightning protection and grounding, installation of electricity, site clearance and engineering and maintenance.

2.4.2 Equipment List and Resource Use

To have a good setting on site, the wooden piles will be nailed, and the Pythagorean theorem will be used to ensure the accurate size and square of the site. A gray line will be spread and marked within the excavated area to avoid over excavation. The leveling pipe will be used to control the elevation of +/-0.00, NGL/FGL. During the construction, cement, sand, gravel, formwork, rebar, and water will be utilized, these materials will be provided by a local supplier. The materials have requirements to meet and to reach the 32.5MPa grade, the production date of the cement shall not exceed 3 months to avoid damping, caking, and collapsing. Medium sand shall be cleaned with a less than 6% mud content. The particle size of the gravel shall be 2-4cm, clean and uniform. Formworks are clean, neat, and solid to effectively support the pouring and tamping of concrete. The rebars provided shall meet the required specifications and sizes and checked the quality. Listed below are some of the tools and equipment that will be used in the construction activities

- 1. Steel Measuring Tape A measuring tool used to measure size of an object of the distance between objects.
- 2. 50 Meter Transect Measuring Tape A flexible measuring tool measures distance between sites and length between objects
- 3. Shovel A tool used to dig, remove excess soil during and after excavation
- 4. Excavator A heavy construction equipment used for digging, lifting, and carrying heavy objects.
- 5. Wheelbarrow Used for moving sand and gravel and disposing debris.
- 6. Torque wrench A tool used to tighten nuts and bolts to the proper tension.
- 7. Caliper Used to measure the distance between the opposite sides of an object.
- 8. Rebar Processing Platform The platform is used for bending and forming rebars for the foundation.
- 9. Crowbar A hand tool used for removing nails and prying materials.
- **10.** Circular saw Used for cutting large-sized materials.
- **11.** Electrical driller A tool used primarily for boring holes, but this can also be used for sanding, screwdriving and grinding.
- **12.** Level A tool used for determining the horizontal and vertical plane.
- **13.** Level Hose/Clear Hose A device used for determining the accuracy of elevation between multiple points.

- **14.** Winch Used for vertical and horizontal lifting if it is inaccessible by cranes of other moving equipment.
- **15.** Concrete Mainly used for cutting thin metal but can also use for cutting plastics.
- **16.** Wire Cutter Commonly used to cut brass and steel wire, it has insulated handles to avoid shocked from the wires.
- 17. Concrete Test Block Mold A concrete test used also for compressive strength of concrete blocks.
- **18.** Paving Beater Used to level the concrete slab or the foot base of the tower.
- **19.** Cement Mixer Used for mixing or combining the cement, sand, gravel and water to make concrete.
- 20. Vibrator Used for concrete compaction, it removes the trapped air, bubbles, and excess moisture.
- **21.** Pickaxe A tool for smashing rocks and ground.
- 22. Hot Wedge Welder Used for bar welding, a heated metal wedge to provide the required heat for melting bars or vinyl coated materials.
- 23. Ground Tester An equipment used to measure the earth or soil resistance.
- 24. Theodolite Mainly used for surveying and navigating dimensions of the area.
- 25. Masonry Trowel Used for spreading and shaping concrete within the hollow blocks.
- 26. Double Open Spanner Also used for tightening and loosening bolts and nuts.
- 27. Hammer A tool designed for manually drive and remove nails.
- **28.** Scaffolding A temporary structure used to support and aid the workers in elevated portion.
- 29. Pulley Used in lifting heavy objects and materials.
- **30.** Safety Harness A gear used by workers to protect them from falling and ensure their safety during working at height.
- **31.** PPE An equipment worn to reduce the exposures to hazards and provide protection and safety to the workers.
- 32. Cellphone Aids to provide mobility, used for communication and emergencies.
- 33. GPS Used for tracking heavy machines and equipment and identify shortest routes
- **34.** Portable Thickness Gauge Used for measuring precise dimensions on coatings and thin materials such as steel

2.4.3 Construction Activities

EPC contractor will bring their construction team onsite but will hire locals for backhoe operation and additional workers for manual loading. However, for sites with limited access, the excavation and mixing of concrete will be manually done. Below table presents the construction methodology that TIPI will implement. The steps and methods used during and after the construction period is presented in **Table 2-5**.

Constructions Methods			Descriptions		
1	Earthworks		Set of operation or execution process which includes the extraction, loading, transport, transformation and improvement, the implementation, stabilization, and compaction of natural materials (soil and rocks). Geotechnical studies or investigation on soil parameters such as soil bearing capacity (75Kpa), soil weight (16kN/m ³), backfill weight (16kN/m ³), internal friction angle of soil (14.00°), cohesive force (20KPa) and backfill thickness (300mm). Testing the overall perpendicularity of each angle (dimension 1 and dimension 2)		
2	Excavation		The excavation will strictly control the elevation base to the laid-out ash line and the depth will be 2 meters in height. When machine excavation is approaching the base level or bottom, a 20 cm soil layer shall be retained for manual digging to avoid over-excavation. Proper sloping and support shall be considered especially during rainy season. When the excavation reaches the base elevation, the loose soil will be manually tamped and flattened. During the excavation, warning tape and protective fence shall be established and set around the excavated area. An open drainage ditches will be set one side or around the foundation pit and a water collection well will be placed each corner of the pit.		
3	Foundation Pit Construction and Support		The size and depth of the foundation pit (excavated pit) shall meet the design requirements. It must be clean, flat and no water and debris. To protect the safety of the underground structure construction and the surrounding environment of the foundation pit, retaining, reinforcement and protection measures are adopted for the side wall of the foundation pit and the surrounding environment. A formwork bin will be created for the mixing of concrete without directly affecting the soil.		
4	Cushion Formworks		A cushion formwork will be erected. If the foundation soil is relatively dry, it shall be watered before the cushion pouring. The volume ratio of the mix proportion of cement, gravel and sand is 1:3:4.		

Table 2-5.Construction Methodology

Constructions Methods			Descriptions		
3	Formwork Works		After the completion of the cushion pouring, workers can start setting out and binding the reinforcement. Rebars will be cut and bend according to the requirements of the design. Workers shall pay attention to the length, size, and quantity of each type of rebars to avoid waste and shortage of reinforcements. The formworks shall be firm, flat, and closely connected to avoid concrete leakage. Steel formwork/wood formwork surfaces must be smooth, and the isolating agent must be brushed when necessary to facilitate formwork removal and ensure a smooth and flat concrete surface. To ensure that the tower foot position, anchor bolt height, and perpendicularity meet the requirements, the anchor bolts and templates will be installed in accordance with the drawings. During the installation of foundation bolts, the project's iron tower and foundation will be linked by inclined anchor bolts. The construction unit must locate and embed the anchor bolts in accordance with the design. Before pouring the concrete, the sundries in the foundation must be cleaned, the mortar inside must be washed away, and a pit around the foundation must be dug for drainage if necessary.		
4	Pouring		During the manual mixing, the volume mix ratio of C25 cement, sand and gravel is generally 1:2:3. The chute shall be set when the concrete pouring height exceeds 2 m to avoid concrete falling and segregation.		
5	Curing		After the concrete is poured, it needs to be watered for curing and covered with plastic film or linen to prevent water evaporation. If honeycomb and pitted surfaces are discovered after formwork removal, they must be chiseled, and high-grade concrete/mortar must be used for filling and painting. The formwork can be removed on the third day after the completion of pouring. The formwork must be carefully removed without damaging the corners of the concrete.		
6	Backfilling		Backfilling should be carried out layer by layer, and the machine can be used for auxiliary backfilling instead of concrete. The organic soil, large pieces of gravel, and other garbage and sundries need to be removed. If it is a hard rock excavation site, it needs to be transported outside for backfilling.		

Constructions Methods			Descriptions		
7	Tower Installation		The tower materials shall be counted and sorted out. They shall be sorted out according to the installation sequence and stacked for easy material collection and installation. Test before tower erection: the concrete strength before tower erection must reach 70% of the design requirements. A hammer rebound test should be carried out on site to check all poured concrete. The elevation of the nut under the tower foot plate must be adjusted. The flat washer/spring washer and tower shoes will be installed. Install the pull rod and the tower legs in turn. The navigation beacon lamp, lightning rod, grounding bar, vertical grounding body, and wiring ladder, anti-falling devices, cable racks should be installed on the tower foot facing south.		
8	Tower Foot Encapsulation, Lightning Protection and Grounding		The encapsulation is 50mm higher than the bolt. The buried depth of the grounding grid must be subject to the detailed design scheme. The lightning strips should be fixed with U-shaped or clip and ladder every 2 meters to prevent deformation. A grounding resistance meter will be used to test the pit, grounding bar, enclosure, and door.		
9	Ground Treatment		Manually level the site, control the FGL and NGL elevations, and vibrate and tamp. 100mm thick gravel shall be backfilled as required, and the gravel silt content shall be less than 1%, and the gravel shall be paved and leveled.		
10	Site Clearance		The site must be clean and free of rubbish. There should be no excess material on site.		
11	Engineering and maintenance		Tower maintenance services after construction to inspect, clean and provide minor repair services to the tower. Perform site investigation and engineering design review and correct issues to ensure stability.		

2.4.4 Manpower Requirements

Manpower in construction is the working force to successfully build and install the tower. The construction unit must consist of the following persons: Site Engineer, Structural Engineer, HSSE Officer, Rebar Worker, Carpenter, Plasterer mud hydraulic worker, Electrician, Foreman, and Workers. Additional local workers will be hired if needed, especially during excavation. To ensure the safety, success and proper transition of the tower installation, manpower requirements must be met.

2.4.5 Waste Generation and Management

Wastes that will be generated include greenery and cuttings from land clearing, spoils from ground preparation and excavation, domestic wastes from workers, solid wastes from packaging and excess materials, and used oil and lubricants. To apply pollution prevention and control practices, waste management are provided accordingly. Greenery and cuttings can be disposed onsite, spoils will be reused and backfilled, portalets which can be hauled offsite can address domestic wastes, and excess materials and solid wastes can be collected by municipal waste collectors or disposed offsite at cost to TIPI.

2.4.6 Duration

According to the EPC contractor, the tower installation will take approximately 60 days. This will include ground preparation, excavation, and construction to site clearance and preparation for operation.

3. Findings on the Environmental, Health and Safety, and Social Management

3.1 Compliance Risk Rating

The risk rankings consider the potential risks and impacts, including environmental, reputational, and financial risk, reasonably associated with the components under the review. The criteria for each risk rating are provided in **Table 3-1**:

Definition	Compliance Risk Level
 No significant issue identified with respect to alignment with ADB SPS, or an item that appears to be not applicable and as such does not have an identifie compliance risk. 	None identified/Negligible
 Item of non-alignment with ADB SPS, however is unlikely to create a materia E&S impact, although should be rectified as a compliance matter. 	Low
 Item of non-alignment with ADB SPS and is required to have additional documentation, improved management measures or allocation of responsibilities to reduce risks and if left unaddressed has the potential to escalate to a high-risk issue; or Item with potentially limited E&S risks/ impacts that are few in number, generally site specific, largely reversible and are likely to be able to be managementation. 	Medium
 Clear significant item of non-alignment with ADB SPS that has the potential t lead (or has already led) to (a) significant adverse E&S impact(s); or Has the potential to lead (or has already led) to adverse media and/or NGO attention; or Has the potential to trigger legal action may lead to a major environmental incident, or may results in fatalities or serious injuries or have irreversible E&S impacts (e.g., clearance of natural forest); or May require significant expenditure (>USD100k) to address the gap and alig with ABD SPS. 	High For the second

3.2 Corporate Documents at the Company Level

Documents provided by TIPI were reviewed in accordance with ADB SPS requirements and applicable standards. The documents reviewed for this Audit are provided in **Table 3-2**. Please refer to **Table 3-1** for the criteria for each risk rating.

Table 3-2. Structure of the Company's ESMS

No.	Aspect	ESMS Documents Available
1.	Environmental and Social Policy	 Preliminary telco tower design and construction methodology including duration, resource requirements, equipment requirements, manpower Anti-bribery and Anti-corruption Policy Anti-discrimination Policy Anti-sexual Harassment Policy Health, Safety and Environment Policy

No.	Aspect	ESMS Documents Available
2.	Screening Categorization and Impact Assessment	 Sample subcontractor/local supplier agreement Complete SAQ Process Flow TSSR MNO Endorsement
3.	Legal Register including National Laws pertaining to E&S matters as well as other references standards	 Engineering design codes or standards: Technical Specification Local permits secured to date SEC registration page 3, Contract TIPI & EPC Contractor True Copy Articles of incorporation 18 Dec 2020 SEC registration, General Info Sheet (GIS) 07 June 2022 Discussion of process flow for site selection and optioneering Lenders Info Memorandum for TIPI May 2022 page 29 TIPI Complete SAQ Process Flow Endorsement of Sites for Acquisition Discussion of process flow for site selection and
4.	Organizational capacity and competency	 optioneering Lenders Info Memorandum for TIPI May 2022 page 29 TIPI Complete SAQ Process Flow Endorsement of Sites for Acquisition Quality Management System methodologies and guidelines Supplier Accreditation Process
5.	Health and Safety	 Sample HSSE plan from similar projects Sample subcontractor/local supplier agreement Safety Manual from subcontractors
6.	Labour	 Sample subcontractor/local supplier agreement
7.	Grievance and Redress Mechanism	Grievance redress process
8.	Monitoring, Reporting, and Review	 Quality Management System Supplier Accreditation Process Sample subcontractor/local supplier agreement Complete SAQ Process Flow

It is noted that the following documents were not available for review during the Audit:

- TIPI safety manual (only subcontractor safety manual was mentioned) •
- Environment management plan on-site ٠
- Emergency response plan •

3.3 Corporate ESMS Compliance Review

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
1.	Environmental and Social Policy	 Preliminary telco tower design and construction methodology including duration, resource requirements, equipment requirements, manpower Anti-bribery and Anti-corruption Policy Anti-discrimination Policy Anti-sexual Harassment Policy TIPI's Health, Safety and Environment Policy (18 April 2022) EPC contract HSSE statement 	 At the business level of TIPI, it only has the HSE Policy (18 April 2022). The author for the HSE policy is the Head of QA but there is provision for communication with contractors and for contractors to include their health and safety in their bids. The policy content is mainly on the general health and safety requirements based on national regulations. It serves as a checklist that covers activities related to tower development and construction and all Tiger Infrastructure employees, contractors, and subcontractors HSE responsibilities. The policy does not include objectives and principles for managing community health and safety. The HSE policy lacks specific management as well as the objectives and principles for managing community health and safety. There is also no separate management plans and procedures to support the HSE policy implementation. Under the HSE Policy, TIPI is requiring contractors to include health and safety plan in their bid. Sample Subcontractors Safety Manual and HSSE plan provides general measures that only covers safety of employees. While TIPI has an HSE policy for the site and implements and controls it. TIPI provides approval for this HSSE policy. Contractor also has safety manual ad quality management system on site but lacks specific management, compliance to discharge and 	Medium	 Develop and implement an ESMS that includes policies, plans, and procedure compliant with ADB's requirements and applicable regulations. Communicate the ESMS to relevant internal and external stakeholders (e.g., contractor), and, if necessary, translate relevant environmental and social policies, plans, and procedures into a language that is comprehensible for local employees and project workers. Ensure contractor's legal obligations include EHS responsibilities aligned with the Company's' ESMS

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
			emissions regulations, biodiversity conservation, pollution abatement, and monitoring. Whilst these policies and procedures provide guidance on specific areas, limited information is available to confirm their implementation. Additionally, limited information is available given that the Project is still currently at the pre- construction stage of acquiring most of the site locations.		
2.	Screening Categorization and Impact Assessment	 Sample subcontractor/local supplier agreement Complete SAQ Process Flow TSSR MNO Endorsement 	 Screening categorization are under the SAQ's responsibility For site selection screening, MNO provides the nominal tower site locations, search radius, and specifications. SAQ prepares and submits the TSSR for three feasible options to MNO. MNO will decide whether to approve the TSSR. If there are no feasible options within the ring, Tiger Infrastructure will submit TSSR for candidates outside the search ring with justification. E&S screening is conducted during the DDD, SAQ, and TSSR. The screening includes assessment of topography, consideration of wind speed at site that should be within design limits, ease of access with proximity to main or barangay roads, absences of obstructions or obstacles, absence of or low susceptibility to flooding. Contractor screening is conducted by PM. Tiger Infrastructure typically engages EPC contractors on a turn-key basis, covering all design, engineering, procurement, construction, installation, testing, and maintenance. The contractor shall submit a health and safety plan, including risk assessments as appropriate to their 	Medium	 Improve the land acquisition process through a more thorough initial screening (e.g. a constraints analysis) of sites during the site selection process that would screen out no-go sites and locations that will trigger category A sites. Develop and implement an EARF to be used for impact assessment and review of future sites. Further biodiversity study should be done for the tower area with reported Philippine eagle sightings.

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
			 contract engagement and method statements outlining the safe work system before work commences. The contractor is also responsible for complying with all relevant environmental and social regulatory requirements for the assigned tower. However, the contractor environmental policy does not include compliance with clean water act, clean air act, hazardous waste management, and solid waste management Environmental aspect and impact assessments are under development as part of the IEE. Under the PEISS, telecommunication towers may secure certificate of non-coverage (CNC) for the ECC application process. This includes tower sites within critical areas. 		
3.	Legal Register including National Laws pertaining to E&S matters as well as other references standards	 Engineering design codes or standards: Technical Specification (EPC Contract No.: 2022-TIPI- 0002) Local permits secured to date SEC registration page 3, Contract TIPI & [INFORMATION REDACTED] True Copy Articles of incorporation 18 Dec 2020 SEC registration, General Info Sheet (GIS) 07 June 2022 Discussion of process flow for site selection and optioneering Lenders Info Memorandum for TIPI May 2022 page 29 TIPI Complete SAQ Process Flow Endorsement of Sites for Acquisition 	 The relevant local environment legal matters are under the responsibility of subcontractor/local supplier such as securing local permits, site assessments, compliance to specific local requirements (ie for CADT, KBA, NIPAS, CW and PW) and security in the area. E&S legal concerns are addressed on-site by local contractors as the requirement arises On the incorporation, and business legal register, TIPI showed compliance to national requirements as proven in the SEC registration and articles of incorporation. On local E&S as well as business legal register, the SAQ is responsible to coordinate with local authorities and determine the necessary requirements. SAQ is able to secure the necessary requirements as proven by the collected permitting documents for each site. The permitting documents corresponds with the land acquisition screening in section 2 and includes barangay clearance, building permit, zoning, electrical, electronics. 	Medium	 Develop and maintain a legal register of applicable regulatory requirements and permit obligations for different project phases

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
			 excavation and ground preparation, fencing, tax clearance, tax declaration. However, SAQ Process does not include special requirements such as those needed for sites under the CADT and key biodiversity areas, as well as sites requiring tree cutting permit. Lease agreements and supporting documents reviewed as well as the interview with the EPC contractor show there were no tree cutting permits and PAMB clearances secured for the site nor were there arrangements to have lessor secure these. 		
4.	Organizational capacity and competency	 Discussion of process flow for site selection and optioneering Lenders Info Memorandum for TIPI May 2022 page 29 TIPI Complete SAQ Process Flow Endorsement of Sites for Acquisition Quality Management System methodologies and guidelines Supplier Accreditation Process 	 A current quality management system is available, but it does not designate who will monitor and review compliance with the QMS. It also does not include the capacity and competency requirements for the execution of the QMS. Current process flow discusses the organizational capacity and competency. This is not verified during the audit. Lack of designated environment and safety officer with relevant certification on site At the time of the audit, Tiger Infrastructure has seven personnel assigned as key project contacts, which include a general manager, finance director, operations director, project director, project manager, head quality assurance, and site acquisition coordinator. There is no dedicated E&S staff within its organizational structure. Most of the relevant environment and social matters on site such as site screening and selection and engagement of lessors are under the responsibility of subcontractor/local supplier. The HSSE management and implementation are delegated to the EPC contractor with TIPI approving the plan. However, there are no provisions for training or criteria of selection of contractors on HSSE experience and 	Medium	 Appoint full time E&S personnel to oversee the ESMS implementation Ensure that the designated and/or appointed full time ES personnel are provided with appropriate training and/or certification of environment Ensure contractor's legal obligations include EHS responsibilities aligned with the Company's' ESMS

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
			 implementation and organization capacity. There is also no training plan The PM is responsible for ensuring and monitoring the EPC contractor in implementing health and safety-related tasks and responsibilities. Mr. Reianjun Ramos will remain as PM but TIPI plans to hire more PMs if tower roll out scales up. 		
5.	Management Plans and Procedures	 Sample HSSE plan from similar projects Sample subcontractor/local supplier agreement Safety Manual from contractors 	 Relevant health and safety policies such as health and safety plan, risks assessment, hazards identification, public safety, reporting, and monitoring are under the responsibility of subcontractor/local supplier The subcontractor policy is lacking specific management as well as the objectives and principles for managing community health and safety. There is also no separate management plans and procedures to support the HSE policy implementation. Under the HSE Policy, TIPI is only responsible for health and safety specifications and has the authority for stop work if there is unsafe working conditions. Lack of designated health and safety officer with relevant certification on site 	Medium	 Develop and implement E&S Management Plans based on the IEE. These will include, but not limited to: OHS Management Plan Community HS MP SEP Waste MP Biodiversity MP Erosion and Sediment control MP Air and noise MP The ESMPs will include mitigating measures, ES monitoring, auditing, and reporting requirements, related institutional or organizational arrangements, capacity development and training, and performance indicators. Ensure that contractor's ESMPs are aligned with the company's relevant ESMPs and these are cascaded to all contractor's workers and their subcontractors. Submit a semi-annual project ES performance to ADB.
6.	Labour and social protection	 Sample subcontractor/local supplier agreement 	 The labor and social protection is covered under the contractor agreement. The management of labor on-site is under the responsibility of the contractor. 	Medium	Integrate the implementation and monitoring of the labor and social protection of subcontractors and local employees in the HR and labor management policy of TIPI. The HR

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
			 The Subcontractor acknowledges that it is solely responsible for the compensation, salaries, wages, overtime pay, bonus, incentive pay, separation pay, retirement pay, and other rights, benefits, and privileges of its employees The Subcontractor shall discharge its duties and comply with its obligations to and respect the rights of the personnel as mandated by the Labor Code and any prevailing labor or social legislation and/or regulations implementing the Labor Code, as amended, on: safe and healthful working conditions; labor standards such as: service incentive leave, rest days, overtime pay, 13th month pay, and separation pay (when applicable); retirement benefits; contributions and remittance of SSS, PhilHealth, PAG-IBIG fund, and other welfare benefits; the right to selforganization, collective bargaining and peaceful concerted action; and the right to security of tenure, and other applicable laws and their implementing rules and regulations. TIPI currently has no system to monitor the implementation of the labor and social protection of subcontractor employees. Skilled workers do not have NC2 certificate During construction, they usually hire local people as laborers. But for skilled works, they bring their own people. For extensive work, they are employing additional manpower 		and labor management policy should also include a process flow for hiring site employees.
7	Stakeholder Engagement including information disclosure and Grievance and Redress Mechanism	 Grievance redress process TIPI Complete SAQ Process Flow 	 The Project is currently at the pre-construction stage which involves securing tower locations and local permits. Stakeholder Engagement Plan (SEP) have not been officially documented to-date. However, the Site Acquisition (SAQ) team comprised of local contractors are currently responsible for activities that involve stakeholder engagements such as 	Medium	 Establish and maintain a grievance redress mechanism to receive and facilitate resolution of affected stakeholders' concerns and grievances about the social and environmental performance at project site. Keep a record of complaints and resolutions;

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
			 surveying potential sites, coordinating with lessors and securing local permits. The SAQ members report back their findings to TIPI's SAQ coordinator. TIPI's SAQ coordinator engages with stakeholders when decisions on-site must be made, and during inspections prior to construction. The current Grievance and Redress Mechanism (GRM) is to solve problems within SAQ member's or SAQ coordinator's jurisdiction. Problems that cannot be solved by SAQ's are to be resolved by legal officer. The current SAQ process only involves engagement with the lessor and relevant local authorities. It does not involve engaging the neighboring lot in the process. Based on the site visit on 11 confirmed site location, the following comments or concerns were noted. Concerns from local authorities: TIPI should provide security during both construction and operation for the site with known skirmish Concerns from local people: TIPI should comply with ambient air quality emission and noise standards during construction Lessors are concerned with the start of construction which is related to start of payment. Some lessors are concerned about their land being idle for a long period. 		 and conduct regular reporting and analysis. Develop and implement a Stakeholder Engagement Plan that will provide framework and guidelines for local SAQ's to implement. Implementation of the SEP should be well documented and should be monitored by the SAQ coordinator.

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
			 Some lessors wanted to amend the contract, specifically on the lease amount, even after signing the contract. 		
			 The IEE is conducted at the same time as the ESCA. The results of the IEE will be used to formulate the ESMP. Thus, the environmental assessment is yet to be disclosed to the stakeholders. This Project is categorized for Certificate of Non-Coverage (CNC) under the PEISS which does not require public hearing. However, barangay hearings were conducted for this Project as part of the information disclosure and gathering of local concerns prior to confirmation of selected sites 		
8	Monitoring, Reporting, and Review	 Supplier Accreditation Process Sample subcontractor/local supplier agreement Complete SAQ Process Flow 	 TIPI's quality management system does not include monitoring mechanisms for HSSE performance. Monitoring and reporting are specific to occupational health and safety such as incident reporting. Same as the relevant health and safety policies, the contractor is also responsible for the monitoring of OHS, incidences, and non- conformance. There is an existing system for TIPIs Supplier Performance Evaluation is included in the sample contractor agreement which includes Skill Certification Coverage, Contractor SQ, One-time Acceptance Rate, Problem Resolved Timely Rate, Scheduled Completion Rate, Resources Readiness Timely Rate, EHS On-site Audit Pass Rate, EHS Accident, CSR Red line Accident, Critical Quality Accident. However, reporting is not yet available given that there is no completed tower to-date. TIPI's project manager is responsible for 		• Establish and implement a program to monitor the company's and contractors' E&S performance taking into consideration the commitments in the ESMS. This can be considered as a part of the development and implementation of the ESMP under item #5 above.

Ref	Aspect	Documents Reviewed	Gaps Findings	Risk Ranking	Actions Required
			 implementing health and safety-related tasks and responsibilities. Based on the audit, the concerns on environmental and social considerations stops after site acquisition. There is no environmental monitoring and reporting system currently in place. Permits required for the construction and commissioning of the project (which are limited to 		
			locational clearances, certificate of no objection, building permits) do not require E&S monitoring and regulatory reporting.		

3.4 Social Compliance Audit at the Site Level

This section shall discuss the findings from the review for social compliance of the *[INFORMATION REDACTED]* sites included in this report. This includes the review of the land acquisition process, including land identification and negotiation, against the IR and IP safeguards. This was done to determine if the SAQ process of TIPI meets ADB requirements regarding the presence/absence of involuntary resettlement and indigenous peoples. A Gap Analysis was also conducted, and recommended actions are included in this audit.

For the Social Compliance Audit was conducted in two phases: the Constraints Analysis and Site Audit. The social compliance audit was also assessed TIPI's compliance on their policies on land acquisition and stakeholder engagement.

The constraints analysis was conducted through a desktop assessment to verify the presence of any overlaps with Indigenous communities or any tenurial conflicts with the *[INFORMATION REDACTED]* sites. Based on the results of this analysis, most sites are in A&D land there are some sites that fall within Watersheds, Key Biodiversity Areas, and National Integrated Protected Area Systems. In themselves, there are no restrictions to build telecommunication towers, as long as legal requirements such as Tree Cutting Permits, etc. are acquired prior to construction. One site is located within an Ancestral Domain which may require additional assessment or engagement.

The site audit was conducted with interviews and photo-documentation to show the characteristics of the site per location. The proposed tower sites are mostly vacant lots while others are planted with vegetables and fruit-bearing trees. No informal settler/third-party/informal user occupies the lots being considered for the location of communication towers and no expropriation by invoking the eminent domain power of the state is likely to occur. With regards to the ADB IR Safeguards, there are no incidences of involuntary resettlement expected to occur on any of the [INFORMATION REDACTED] sites.

TIPI's project brief identifies the locations for *[INFORMATION REDACTED]* telecommunications towers, but no assessment has been conducted to date, except as determined in this report, to determine whether the locations of the proposed towers fall within the Certificate of Ancestral Domain Claim (CADC)/ Certificate of Ancestral Land Claim (CALC) and Certificate of Ancestral Domain Title (CADT)/ Certificate of Ancestral Land Tittle (CALT). TIPI has not undergone the Free and Prior Informed Consent (FPIC) process as required under the IPRA Law and directly negotiated with the occupant of the land, based on tax declaration, when the proposed project site. There Site 10is a site under the indigenous people Tribe based on municipal record. However, TIPI has shown an intent to comply with the FPIC process when the Audit Team, along with TIPI representatives, went to the NCIP Office in the municipality to seek guidance on the FPIC process. There are also migrant IPs that are lessors for other sites. The lessors that are migrant IPs have titled lands, one of the sites being land owned by the Barangay and is under S.P.A. for the Barangay Captain (lessor) for the lease agreement. And the other site is under a clan title; however, the land has been informally divided amongst the clan members. The lessor expressed that the clan has plans to legally divide the land and the tower location is within his informally sectioned land.

Based on the site visit on the tower locations, there appears an issue on the determination of the basis of monthly rental to be given to lessors. Lease value per month ranges from *[INFORMATION REDACTED]*. The lease value was determined from the endorsed fair market value of MNO. However there needs to be a thorough determination of the basis of the fair market value as some land parcels have vegetation, some already enclosed with concrete and iron fence, while some are open space. These observations may also be true on the other three tower locations not visited.

Despite the various issues that were captured during the site visit, the Project is expected to have positive impacts for the Indigenous Peoples/Indigenous Cultural Communities and the larger community in general, from the creation of an opportunity for direct employment, increased income through provision of other services or supplies, and learning of new skills or on-the-job training for IPs and members of the community through the Social Development Plans that TIPI will be implementing.

There were three (3) sites where the site audit was not conducted, however these were assessed through satellite imagery, phone interview, and secondary data from TIPI. The secondary data consisted of the site-specific documents (e.g. TSSR, Lessors Information Sheet, etc.), as well as extensive photos of the site taken during the SAQ process.

3.4.1 Constraints Analysis

Prior to the site visit, the consultant conducted a constraints analysis using ArcGIS to conduct location screening for each of the tower sites/clusters according to significant landforms located adjacent or within landforms or protected areas declared by the DENR through its online portal www.geoportal.gov.ph. The proximity of each of the tower sites to the Agrarian Reform Communities, Certificate of Ancestral Domain Title (CADT), Key Biodiversity Area (KBA), National Integrated Protected Areas System (NIPAS), Critical Watersheds (CW), and Protected Watersheds (PW) were calculated and analyzed. This was done to consider the potential impacts of the Project to these significant landforms and/or protected areas. The result of this analysis is presented below.

There are sites located adjacent or within landforms or protected areas declared by the Department of Environment and Natural Resources (www.geoportal.gov.ph). One of the site has the most overlap with significant landforms as it is located within a Certificate of Ancestral Domain Title, Agrarian Reform Community, and River Watershed, which is a critical and protected watershed, as well as an initial component of NIPAS.

Table 3-3.Results of the Initial Constraints Analysis

[INFORMATION REDACTED]

Tiger Infrastructure Philippines Inc. Telecommunications Towers Project

Certificate of Ancestral Domain

A Certificate of Ancestral Domain Title (CADT) is defined by the DENR as a title that is awarded to Indigenous People or Indigenous Cultural Communities to recognize their rights of possession and ownership over their ancestral domains identified and delineated, in accordance with Republic Act 8371, "The Indigenous Peoples' Rights Act of 1997". Of the [INFORMATION REDACTED] initial sites identified, only one (1) site is located within a CADT while another is located within a clan title/CALT. [INFORMATION REDACTED] **REDACTED1**

[Maps deleted as it falls within the exceptions to disclosure specified in ADB's Access to Information Policy (September 2018)].

Agrarian Reform Communities

Agrarian Reform Communities (ARC) are defined by the DENR as either a Barangay or cluster of Barangays with a 'critical mass' of farmers or farm workers wherein the land tenure improvement and effective delivery of support services for agrarian development is being implemented. As calculated based on Economic, Socio-Political, and Ecological parameters, there are three (3) classifications of ARCs: High, Medium, and Low. These classifications can further be categorized under Prime, Semi-Prime, and Satellite. Of the initial sites identified, three (3) are located within Agrarian Reform Communities. [INFORMATION REDACTED]

[Maps deleted as it falls within the exceptions to disclosure specified in ADB's Access to Information Policy (September 2018)].

Critical Watershed

Critical Watersheds are defined by the DENR as a drainage area of a river system that supports either existing or proposed hydroelectric power, irrigation work, or water facilities needing immediate protection and rehabilitation to minimize erosion and improve water yield. Of the initial sites identified, five (5) are located within critical watersheds. [INFORMATION REDACTED]

[Maps deleted as it falls within the exceptions to disclosure specified in ADB's Access to Information Policy (September 2018)].

Proclaimed Watershed

Proclaimed Watersheds are defined by the DENR as watersheds that were specifically designated for domestic water supply, irrigation, hydroelectric power generation, and multiple use. Of the initially identified sites, two (2) are located within Proclaimed Watersheds. [INFORMATION REDACTED]

[Maps deleted as it falls within the exceptions to disclosure specified in ADB's Access to Information Policy (September 2018)].

National Integrated Protected Area System

The National Integrated Protected Area System is defined by the DENR as the classification and administration of all designated protected areas to do the following: (a) maintain essential ecological processes and life-support systems; (b) preserve genetic diversity; (c) ensure sustainable use of resources found therein; and (d) maintain their natural conditions to the greatest extent possible. Of the initial sites identified, three (3) are within NIPAS areas. [INFORMATION] REDACTED1

[Maps deleted as it falls within the exceptions to disclosure specified in ADB's Access to Information Policy (September 2018)].

Key Biodiversity Area

Key Biodiversity Areas (KBA) is an approach used to identify conservation priorities in the Philippines. Of the initial sites identified, one (1) is within a KBA. [INFORMATION REDACTED]

[Maps deleted as it falls within the exceptions to disclosure specified in ADB's Access to Information Policy (September 2018)].

3.4.2 Site Visit

3.4.2.1 Project Status

The consultant undertook a site visit to 11 of the *[INFORMATION REDACTED]* confirmed tower site locations in Mindanao, Philippines from 14 to 19 September 2022. For the 3 sites that were not visited, information was based on review of records, lease agreements, interviews with the site acquisition team, site photos and google earth maps. Most of the sites were located on idle land and were near residential areas. The sites were accessible either via paved roads or all-weather roads connected to paved Barangay or Municipal roads.

The procedure for site selection and acquisition follows the complete Site Acquisition Process Flow. The initial *[INFORMATION REDACTED]* sites were identified from application or endorsement letter with nominal point, search ring, and technical specifications required by the MNO, usually sent out by batches. This procedure is followed by TIPI's acceptance of the endorsement letter from MNO and response to the letter within five (5) working days. Once endorsement is accepted, site hunting is conducted for at least three (3) possible candidates selected. The lease and commercial terms were pre-negotiated for the lot owners with the remuneration for lease indicated in the MLA with the MNO according to site location/region Once sites are viable, procedure advances to technical site survey report (TSSR). TSSR for three viable options are submitted to the operator. Operator will then decide whether to approve the TSSR. TIPI then negotiates a lease agreement or memorandum of contract followed by the acquisition of documents from the lessor such as property documents, legal supporting document, proof of ownership, and signed contract. On behalf of TIPI, SAQ contractor negotiates their terms and conditions with the landowners.

3.4.2.1.1 Current Land Use Status

Most of the tower sites are located in areas zoned as Residential, with some in Agricultural and Commercial. The total land area for each tower site is typically 225 m² (15 mx 15 m), but some are 144 m² (12 m x12 m). These areas are based on the detailed design drawing per tower and soil conditions based on the technical site survey and soil tests. The soil strength, lot area and design requirements may vary per tower hence the differences in tower footprint. Each tower site location with associated land area and current land use is presented in **Table 3-4**.

Table 3-4.The Project's Land Use Summary[INFORMATION REDACTED]

3.4.2.2 Rapid Environmental Assessment

A rapid environmental assessment (REA) was conducted for each of the 11 towers, including land use, soil type, adjacent water bodies, and existing flora and fauna within the proposed site and within a 1-km radius.

A rapid biodiversity assessment was also conducted as part of REA to establish the baseline condition of the proposed project sites was conducted through direct observation and interviews of the lessors and field guides. All faunal and floral species in the proposed project sites were recorded. And due to relatively small areas that will be utilized by the proposed communications towers and to give an overview of the existing biodiversity in the adjacent areas, an assessment of the 1-km radius was undertaken through direct observation and interviews of locals.

Information on conservation status, endemicity, residency, and other information were determined through published information (e.g., books and journals) and online references (e.g., IUCN Red List Assessment, BirdLife International, etc.).

The key observations within the individual site locations, as well as the risks and recommendations, are presented in **Appendix A**.

3.4.2.2.1 Fauna

With the exception of the Philippine eagle (*Pithecophaga jefferyi*) which is categorized as Critically Endangered (CR), all bird species recorded in the proposed project sites are categorized as Least Concern (LC) in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species and DAO 2019-09 the

Updated National List of Threatened Philippine Fauna and their Categories. Although not observed during the site visit, one of the sites, based on interview, is reportedly a bird flyway of the Philippine eagle as this is located near Mt. Apo and with Kidapawan City and the rest of Mindanao considered as native residence of the species.

3.4.2.2.2 Flora

Most of the existing flora within the proposed site are fruit-bearing trees such as durian (*Durio zibethinus*), lansones (*Lansium domesticum*), rambutan (*Nephelium lappaceum*), guava (*Psidium guajava*), guyabano (*Annona muricata*), coconut (*Cocos nucifera*), including herbs, grasses, vegetables, and ornamental plants.

Within the 1km-radius of the proposed project sites, trees and saplings of smooth narra (*Pterocarpus indicus* forma *indicus*), an endangered (EN) species based on IUCN Red List Assessment were documented. Marang (*Artocarpus odoratissimus*) has a global status of Near Threatened (NT) but very common in Mindanao. Two epiphytes, bird's nest fern (*Asplenium nidus*) and oak-leaf fern (*Drynaria quercifolia*) categorized as Vulnerable under the DENR Administrative Order 01 series 2007 are very common especially on coconuts and mango trees.

3.4.2.3 Socio-Economic Assessment

3.4.2.3.1 Results of Site Interviews and Assessment

A high-level social impact assessment was conducted through Key Informant Interviews (KIIs) with the site lessors, as well as the Barangay and Municipal local government officials, when possible. As part of the social impact assessment, lessors' basic information including settlement history, educational profile, living conditions, household information, waste management, nutrition, community awareness, climate change adaptation and disaster risk awareness, as well as perceived quality of life were determined. Also included was the history of their interaction with TIPI, as well as their take on the lease agreements and their concerns regarding the towers that may be built.

Almost half of the lessors that were interviewed during the site visit were senior citizens, with only three (3) of the eleven lessors being under 50. Five (5) lessors are Indigenous Peoples; however, only one (1) site are within a CADT and another one (1) under a Clan Title. The rest of the sites are individually titled lands owned by the lessors. The lessors that have titled lands are migrant IPs that have since migrated from their ancestral land into private land. For this audit, we consider these migrant IPs because there are sensitivities to be considered when engaging and interacting with them. One of the site is under the indigenous people Tribe based on municipal record. One of the site is under a clan title, however the land has been informally divided amongst the clan members. The lessor expressed that the clan has plans to legally divide the land and the tower location is within his informally sectioned land.

Most of the lessors have their steady sources of income (e.g., store owner, farm owners, etc.) and viewed having the tower located in their property as a means of earning extra to support their needs (e.g., medicine purchase, educational fund, etc.). The lessors for two of the sites are both senior citizens and no longer have a direct source of income. Both lessors depend on their family members (children and grandchildren) for their day-to-day expenses. Most properties are located within residential areas based on the zoning ordinance connected by unpaved roads to paved barangay or municipal road.

The [INFORMATION REDACTED] proposed sites are located cities and municipalities of varying classes from three provinces. [INFORMATION REDACTED]

Three of the lessors have internal arrangements with family members who signed the lease agreement with TIPI. Lessors for two sites are 63 and 82 years old, wherein the lease agreements were signed by their children. One of the sites being land owned by the Barangay, this is under S.P.A. for the Barangay Captain (lessor) for the purpose of the lease agreement. In the case of the land under a CADT, there is a tax declaration and Barangay resolution stating the lessor as the owner of the land. During the site assessment, the lessor's nephew claimed that he had inherited the land from his father, the lessor's brother, upon his death. It was conveyed that the lessor is named in the tax declaration as he takes care of the tax and other fees required for the land. As previously discussed, one of the site is not under the lessor's name, as land is under a Clan Title.

The agreed monthly rental fees for the use of the lessors' land ranges, with varying advance payment agreements with individual lessors.

3.4.2.4 Identified Risks and Concerns

The identified risks and concerns raised during the Social Compliance Audit are regarding supplemental documentation, determination of monthly rental and other considerations, and crop/tree and other improvement/structure losses.

Supplemental Documentation

There are sites that are legally named under another individual or under a Clan Title. In this case, complete documentation on the arrangement must be acquired. This can come in the form of an S.P.A., e.g. children negotiating on their parents behalf, or other legal documentation on internal arrangements. An example of internal arrangements is the case of one of the site, where disbursement of payment is to be remunerated to the individual named in the tax declaration (lessor) who to the claimant (lessor's nephew). For sites that are under a Clan Title, complete documentation on the division of land must be acquired from the lessor stating authority over the concerned land parcel. Additionally, undergoing the FPIC Process is required for sites that are located within Ancestral Domains under the IPRA Law.

Determination of Monthly Rental and Other Considerations

There is also a concern on the determination of the basis of monthly rental to be given to lessors. A thorough determination of the basis of the fair market value should be conducted as the lease value was determined from the endorsed fair market value of MNO.

Crop/Tree and other improvement/structure losses

The Rapid Site Assessment risks and concerns were generally concerning noise and vibration impacts and site access for the sites. There are sites located close to Residential structures, of which it is not yet clear whether there has been communication on possible impacts or compensation during construction to the residents. The vibrations and noise would be predominantly during the construction phase. Noise and Vibration during the operations phase are considered to be negligible. Some sites may have access limitations due to being located within a gated lot or being off the Barangay or other cemented roads.

Other potential issues regarding biodiversity are in terms of biodiversity management (tree cutting and bird pathways), hazards (such as flooding, earthquakes), and for safety. With regards to biodiversity, most of the sites have existing trees that would need to be cut during the construction phase and would need to have the necessary permits applied prior. One of the site is located within the flyway of the Philippine Eagle (*Pithecophaga jefferyi*) and the Mindanao Hornbill (*Penelopides affinis*). In terms of hazards, the entirety of Mindanao is tectonically active, and earthquakes of smaller magnitude (<5) are fairly common, while three (3) sites are located in areas that experience flooding. With regards to safety, One of the sites is in an area known for skirmishes and safety may be a concern during construction as well as once the tower is operational.

3.4.2.5 Site Descriptions

The locations of the eleven (11) sites that were visited during the 14-19 September 2022 rapid environmental assessment, as well as photographs and short descriptions, are presented in the succeeding tables. Information on current land use is based on actual field observation while the land use classification was based on available municipal record (e.g., zoning ordinance, tax declaration, etc.). For the 3 sites that were not visited, information was based on the site photos and description included in the Site Description List from TIPI, copies of lease documents, and latest satellite imagery from Google Earth and ESRI.

All [INFORMATION REDACTED] sites are accessible through from the main road and barangay roads. The access roads going to the site area are accessible by vehicles and heavy equipment. For possible locations of staging/laydown areas during construction, it was observed that all sites either have a neighboring vacant lot, or the lease area is located only on a portion of the land owned by lessor. In the case of the latter, negotiations may be conducted to utilize the idle land remaining for the staging.

Almost half of the lessors that were interviewed during the site visit were senior citizens, with only three (3) of the eleven lessors being under 50. Five of the lessors are members of Indigenous People, however, only one (1) site are within a CADT and another one (1) under a Clan Title. The rest of the sites are individually titled lands owned by the lessors. The IPs that have titled lands are treated as migrant IP since they have migrated away from their ancestral land to private land.

Generally, the lessors are welcoming of the project and anticipating and continuously following up the commencement of construction of the tower. Based on the interview conducted, they will use it for additional capital for agriculture, health maintenance, startup small business to support daily needs and allowance for their children and grandchildren. The lease payment is anticipated to be a source of passive income among half of the sites. These lessors have active-owned businesses such as convenience stores, restaurant, falcata plantation, farm (root crops, rice, corn, copra), salon, vegetable stand in the market and hardware.

Most of the proposed land is idle land, and lessors were excited when they realized they would receive passive income from these lots. But in certain cases, such as the lessor in one of the site, there was an observed arievance on the arrangement of the discussion on the lease agreement (payment terms in term of advance payment). One of the factors causing this is the difference of preference between the lessor and their spouse. It was briefly explained to them about the timeline and overview of the project and its processes to resolve the issue. At another site, the lessor was not available for the interview, so the lessor's nephew was interviewed instead. The land title was in the name of the lessor, but the land is used by the lessor's nephew. According to the lessor's nephew, they have an internal and verbal agreement between them the lessor will be the one to receive the remuneration since he has the legal documents and can provide bank details. However, during the discussion with NCIP, the lessor's nephew was unaware of the process and the land is tribal owned land. On another site, the parents of the lessor were interviewed on her behalf since she's studying in Davao. It was specifically purchased for their daughter's (lessor's) passive income. The lessor's land area in one of the site is titled as clan [INFORMATION REDACTED]. The lessor is anticipating the start of construction on the tower. Because the advance payment will be used to process the land title documents. Even the neighboring houses were part of the clan title, but they were purchased by individuals who were not members of the clan. There was no coercion involved and the willingness and excitement of the lessors were observed. The lessors' main concerns were when the tower construction would begin and who they would contact for lease money. The lessors were given assurance by the SAQ coordinator by giving definite contact person with contact number if they have concerns.

Tiger Infrastructure Philippines Inc. Telecommunications Towers Project

Site 1 Based on the municipal zoning ordinance (ZO), the land is zoned within commercial district; Description: however, most of the areas are being used as residential. Proposed lot are very close to housed which is surrounded by a concrete wall and galvanized iron sheets as fence. Several vegetations were noted inside including vegetables, herbs, ornamentals, and fruit-bearing trees. The lessor indicated that the land was their previous residence, prior to relocating to a home closer to the main road which has a sari-sari store as an additional source of income. The existing structure on the site will be avoided. The lessor also stated that they would not mind if it were demolished because it was only used for storage. There is a vacant lot adjacent to it can be used as a laydown area and staging area. Proposed lot containing the crops planted by the Fire walls of adjacent houses lessor for consumption and recreational purposed [This information has been redacted as it contains commercially sensitive information.] A wooden house previously served as the residence of Fire walls separating the proposed site from the lessor and presently use for storage. This structure neighbouring houses will not be demolished. [This information has been redacted as it contains [This information has been redacted as it contains commercially sensitive information.] commercially sensitive information.] Access point to the site is via an unpaved pathway that Entry point to site the proposed tower site . connects to the the paved Barangay road.

Tiger Infrastructure Philippines Inc. Telecommunications Towers Project

Site 2Description:The land is classified as commercial based on ZO but currently used as residential. The lot is within
Villar Compound (lessor), which also houses their abode, warehouse, and garage. The compound
is fenced by concrete walls with metal bars. Portion of the proposed lot is being used as dump
area for domestic waste. Palms, fruit-bearing trees, and vegetables are present in the target lot.
TIPI assured that the concrete and metal fence will remain in place, and that the tower's entry
point will face the compound's main gate.



Fruit-bearing trees and vegetables within the target lot

Concrete walls with metal bars fenced the compound



Portion of the proposed lot being used as dump siteProposed lot inside the lessor's compound.[This information has been redacted as it contains
commercially sensitive information.][This information has been redacted as it contains
commercially sensitive information.]

The access point to the Compound, connected to the paved barangay road,	The Compound structures such as the lessor's house, warehouse and garage adjacent to the lot

Tiger Infrastructure Philippines Inc. Telecommunications Towers Project



Tiger Infrastructure Philippines Inc. Telecommunications Towers Project



Tiger Infrastructure Philippines Inc. Telecommunications Towers Project



construction and installation of the tower.

Tiger Infrastructure Philippines Inc. Telecommunications Towers Project

Description:

Site 6 The land area is classified as residential based on the zoning ordinance and current land use. The proposed site is proximate to a claimed man-made creek which is about 2 m-away. The land area is an open space with fruit-bearing trees, coconut trees and herbs outside the fence line of the proposed site. The coconut trees were harvested every 3 months. A warehouse, residential houses and goats pen near the proposed site.



Open area adjacent to a residential house



Warehouse and goats pen adjacent to proposed lot



Polluted man-made creek (presumably being used by small scale mining activities) adjacent to the lot



Proposed site facing the all weather barangay road as access point to the property



The proposed site facing a rainfed rice field





Tiger Infrastructure Philippines Inc. Telecommunications Towers Project

Site 9Description:The land area was classified as agricultural land based on the zoning ordinance and
current land use. The proposed site was used to be planted with rice and corn, however,
as per lessor due to irrigation the crops were not growing healthily. There were hardwood
trees, fruit-bearing trees and coconut trees present within the proposed land area. A
residential house was also closed to the site.



Proposed site facing the barangay road. Access point to the proposed site

Banana) and the poultry/livestocks from the neighboring households

Description

Site 10

The land is classified as residential based on ZO and current land use. The proposed lot part of the CADT. But it is currently used as a basketball court for recreational purposes. There are houses adjacent to the proposed site, including the lessor's house. Only one tree is present within the proposed lot, the kakawate (Gliricidia sepium) under the family Fabaceae.



The proposed site for the tower



barangay road [This information has been redacted as it contains

commercially sensitive information.]

Nearest house in the proposed land area The open space's entry point, also showing the view of Lake Sebu. The other side of the property has a sloping terrain

Tiger Infrastructure Philippines Inc. Telecommunications Towers Project

Description:

Site 11

The land area is classified as agricultural land based on ZO and current land use. fruit-bearing trees, herbs, and grasses. Adjacent is the barangay hall of Ilomavis and a private owned land with seedlings of kakawate (*Gliricidia sepium*). A housing project and crop farming of the barangay was also located at the back side of the proposed site.





Proposed site dominated by herbs, ferns and grasses

Sapling of mangosteen, and herbs in the proposed site



Coconut trees, mangosteen sapling and herbs within the proposed site



Coconut tree, banana, mangosteen andseveral ferns, herbas and grasses within the proposed site





Showing the crops and housing project of the barangay

Existing structures adjacent to the proposed site

3.4.3 Social Compliance Audit

Reference	ADB SPS Requirement and Applicable Legislations	Gaps/Findings	Risk Ranking	Action Required
1. Involuntary Resettlement				
 The Policy aims to: Avoid involuntary resettlement wherever feasible Minimize resettlement where population displacement is unavoidable by exploring all viable project options. If, nonetheless, individuals or communities must lose their land, means of livelihood, social support systems, or way of life they should be: compensated for lost assets and loss of income and livelihood assisted for relocation 	• ADB SPS Involuntary Resettlements Safeguard Requirements 2 does not apply	No informal settlers occupy the lots being considered for the location of communication towers and no expropriation by invoking the eminent domain power of the state is likely to occur. Based on the site visit on the 11 tower locations, there appears an issue on the determination of the basis of monthly rental to be given to lessors. Lease value per month ranges from <i>[INFORMATION REDACTED]</i> . The lease value was determined from the endorsed fair market value of MNO. However there needs to be a thorough determination of the basis of the fair market value. As per one of the lessor, there were changes with the offer <i>[INFORMATION REDACTED]</i>	High	TIPI must enhance their Land Acquisition Protocol which shall consider payment of additional monetary compensation to the market value of land, including for those lots that are not idle lands, improvement losses, and provide a rational measure of the same. ADB Performance Standards requires that remuneration be above the baseline amount and should bring a positive impact or improvement of quality of life of the lessor The Land Acquisition Process should include defined processes and assessment of remuneration. For determining land value, refer to Manual on Real Property Appraisal and Assessment Operations (BLGF 2006). It would be advisable to engage a competent licensed real estate appraiser who is knowledgeable of how real estate markets operate. Another example for
 assisted so that their economic and social future will generally be at least as favorable with the project as without it provided with appropriate land, housing, infrastructure, and other compensation, comparable to the without-project situation 		Improvement losses to be considered in addition to lease of land is likely to occur especially for lots planted with vegetables, root crops, coconuts and fruit-bearing trees which will be impacted with the construction of the communication towers. Sites with vegetations include the following: [INFORMATION REDACTED].		determining land value is to seek a quotation from the City of Municipal Assessor's office per square meter for applicable land type and the conduct of an assessment of compensation based on quality of the lot and proximity to linear infrastructure.

Reference	ADB SPS Requirement and Applicable Legislations	Gaps/Findings	Risk Ranking	Action Required
 fully informed and closely consulted on resettlement and compensation options The Policy also specifies that lack of formal legal title to land is not a bar to compensation and other assistance. This may apply to a range of people affected, e.g., informal dwellers, land users with traditional or customary rights, squatters, or those with adverse possession rights but no formal legal title to land and assets. Appropriate assistance provided to address the needs of the poorest affected persons such as female-headed households, and other vulnerable groups such as indigenous peoples, helps them improve their status. 		TIPI offers a monthly rental ranges from [INFORMATION REDACTED] with no clear basis for the offered amount.		
	1			

2. Indigenous Peoples

Reference	ADB SPS Requirement and Applicable Legislations	Gaps/Findings	Risk Ranking	Action Required
	 ILO Convention No. 169 on Indigenous and Tribal Peoples (1989) 			in need of the infrastructure. In case of tenurial disputes or conflicts, consider alternative sites within the nominal ring radius practiced in the SAQ.
	 International Convention on the Elimination of all Forms of Racial Discrimination (UN, 1965) 			• For sites that are within ICCs, conduct a social impact assessment following the methodology in the IPPF.
	• Convention Concerning the Protection of the World Cultural and Natural Heritage (the World Heritage Convention) (1972)			
	• Convention for the Safeguarding of Intangible Cultural Heritage (2003)			
	Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005)			
	Republic Act 8371 -Indigenous Peoples Rights Act of 1997			
	• NCIP Administrative Order No. 3 Series of 2012 (The Revised Guidelines on Free and Prior Informed Consent (FPIC) and Related Processes of 2012)			
	 NCIP Administrative Order No. 1 Series of 2004 (Guidelines on the Formulation of the Ancestral Domain Sustainable Development and Protection Plan) 			

Reference	ADB SPS Requirement and Applicable Legislations	Gaps/Findings	Risk Ranking	Action Required
b. Migrant IPs/ICCs	 ADB SPS Indigenous Peoples Safeguard Requirements 3 	TIPI has not done a formal identification of ICCs/IPs that might be impacted (positive and negative) by the proposed project.	High	• TIPI should consult migrant IPs within the surrounding community outside CADC/CALC and CADT as well to engage them in a manner that is sensitive to their culture and beliefs.
3. Human Resource (HR) Policies/Proc	edures			
	• Labor Code of the Philippines PD No. 442 of 1974	TIPI has an HR Policy, but this is general in nature with no specifics on labor management plan and specific statements on non-discrimination regardless of ethnicity, gender, sectoral group. Also, no specific statement against child labor. Sample subcontractor agreement from [INFORMATION REDACTED] includes the following statement: "The Subcontractor warrants that it has complied and will continue, for the Term of this Agreement and thereafter, to comply with all relevant and applicable labor and other social legislation and/or regulations, such as DOLE Department Oder No. 19, Series of 1993, DOLE Department Order No. 13, Series of 1998, and DOLE-DPWH-DILG-DTI and PCAB Memorandum of Agreement - Joint Administrative Order No. 1, Series of 2011, and any prevailing labor or social legislation and/or regulations implementing the Labor Code, as amended."	High	 TIPI should improve their Labor Management Plans and HR policies/ procedures that deals with HR matters including those related to working conditions, commitment to no child labor, non-discrimination, respect for freedom of association for all types of employees. TIPI should communicate HR information and policies clearly to all employees, document and maintain relevant communication records. TIPI should monitor and report on EPC and contractor compliance in the semi-annual social monitoring reports.
4. Human Resource (HR) Practice Issue	25			
	 RA 10691 An Act Defining the Role of the DOLE, LGUs and Accredited NGOs in the Establishment and Operation of the PESO and the Operation of 	TIPI relies on their EPC contractor for labor. There is no established policy for hiring local laborers in site. Also, no coordination with Public/Barangay Employment Service Office (PESO/BESO). No proof	Medium	 Establish connection and coordination with Public/Barangay Employment Service Office (PESO/BESO).

Reference	ADB SPS Requirement and Applicable Legislations	Gaps/Findings	Risk Ranking	Action Required
	Job Placement Offices in Educational Institution D.O. No. 157-16 IRRs, otherwise known as the PESO Act of 1999	that TIPI is following local labor code in terms of compensation.		• Ensure that labor practices are in line with the labor code requirement in terms of compensation, provide records and documentations supporting the compensations

3.5 Review and Analysis of Climate Risks

Variation of Climate Pattern	Specific Change	Effects	Adaptation Measures	Recommendations
Increased intensity and frequency of extreme weather events and climate change	Unexpected and abnormally high wind speeds	Damage to the structural integrity of the towers from intense wind speed and precipitation	Incorporation of peak wind speed and projected wind speed Design and construction should be adapted to withstand higher wind speeds associated with strong tropical cyclones and other extreme weather events More frequent inspection and maintenance	Access to facility repairs or emergency repair team should be established for quick repair of damages and restoration of operations
	Frequent flooding, thunderstorms, lightning struck	More frequent flooding episodes. More violent storm surges Tropical cyclone/typhoon	Design and construction should be adapted to withstand flooding Site screening or consider shifting in other location to less vulnerable areas More frequent inspection and maintenance	Access to facility repairs or emergency repair team should be established for quick repair of damages and restoration of operations

3.6 Project Categorization

Following the ADB's SPS Categorization System, and based on the gap analysis conducted above, the proposed categorizations of the Project are presented in Table 3-5.

Table 3-5.Project Categorization

Project Environment		Involuntary Resettlement	Indigenous Peoples		
TIPI Telecommunications Tower	Category B	Category C	Category B		

The meaning of the Project categorization is:

- *Category B for Environment*. Based on the information provided, the impact level is considered to be generally site-specific, few, if any of them are irreversible if properly managed.
- Category C for Involuntary Resettlement. Land acquisition does not entail physical or economic involuntary resettlement. Land is obtained through negotiated settlement based on willing lessor – willing lessee. There are no informal/third-party users of land that are involuntarily impacted by the lease of the land. Locations that would result in involuntary resettlement will be avoided in the selection process.
- Category B for Indigenous People. There are some planned locations of telecommunication towers that are within communally or collectively owned/claimed land by indigenous people's communities. Impacts of the towers on these areas are expected to be limited and would not result in significant impact on IPs since there is sufficient flexibility in selecting tower locations. Locations that would have significant adverse impacts on IPs will be avoided.

4. Corrective Action Plan

This section summarizes the proposed list of corrective actions that should be undertaken by TIPI to address the gaps against the applicable standards identified in Section 3 of this Assessment report. The proposed corrective action plan (CAP) is provided in Table 4-1.

Table 4-1.Corrective Action Plan

Ref	Corrective Action	Priority	Deliverable	Responsibility	Timeline	Indicative Budget		
Corpo	Corporate ESMS							
1	Develop and implement an ESMS that includes policies, plans, and procedure compliant with ADB's requirements and applicable regulations.	Medium	An ESMS approved by TIPI management and acceptable to ADB	TIPI	Prior to first disbursement	Internal staff hours of TIPI incorporated in capital or operations expense		
2	Communicate the ESMS to relevant internal and external stakeholders (e.g., contractor), and, if necessary, translate relevant environmental and social policies, plans, and procedures into a language that is comprehensible for local employees and project workers.	Medium	Evidence of communication with TIPI staff and existing contractors Translated version of abridged ESMS to local language that can be used during workers' orientation	TIPI	Prior to first disbursement	Internal staff hours of TIPI incorporated in capital or operations expense		
3	Ensure contractor's legal obligations include EHS responsibilities aligned with the Company's ESMS	Medium	Proforma of legal agreement with relevant EHS provisions	TIPI	Prior to construction of sites	Internal staff hours of TIPI incorporated in capital or operations expense		
4	Develop and implement environmental and social screening and site selection process that would screen out no-go sites and location that will trigger category A sites.	Medium	Environmental and social site screening selection checklist IEE containing accomplished screening checklist	TIPI	Prior to disbursement Prior to construction of sites	Internal staff hours of TIPI incorporated in capital or operations expense		
5	Implement an EARF to be used for impact assessment and review of future sites. Further biodiversity study should be done for the tower area with reported Philippine eagle sightings	Medium	IEE for clustered sites	TIPI	Prior to construction of sites	[INFORMATION REDACTED]		

Ref	Corrective Action	Priority	Deliverable	Responsibility	Timeline	Indicative Budget
6	Develop and maintain a legal register of applicable regulatory requirements and permit obligations for different project phases	Medium	Legal register	TIPI	Three (3) months from disbursement	Internal staff hours of TIPI incorporated in capital or operations expense
7	Appoint a full time E&S personnel who will oversee the ESMS implementation	Medium	JD and CV of HSE personnel for ADB review Evidence of Appointment	TIPI	Prior to disbursement Prior to disbursement	Operations expense
8	Ensure that the designated and/or appointed full time ES personnel is provided with appropriate training and/or certification	Medium	Training plan Declaration of completion of training, such as certification	TIPI	Three (3) months from disbursement Semi-annually in Safeguards and Social Monitoring Reports	Internal staff hours of TIPI incorporated in capital or operations expense. Note that training expense will be varying depending on the level of training to be availed.
9	 Develop and implement E&S Management Plans based on the IEE. These will include, but not limited to: OHS Management Plan Community HS MP SEP Waste MP Biodiversity MP Erosion and Sediment control MP Air and noise MP The ESMPs will include mitigating measures, ES monitoring, auditing, and reporting requirements, related institutional or organizational arrangements, capacity development and training, and performance indicators. 	Medium	ESMP accepted by ADB Safeguards and Social Monitoring Report	TIPI	Prior to first disbursement Semi-annually	Internal staff hours of TIPI incorporated in capital or operations expense.

Ref	Corrective Action	Priority	Deliverable	Responsibility	Timeline	Indicative Budget
10	Enhance the implementation and monitoring of the labor and social protection of subcontractors and local employees in the HR and labor management policy of TIPI. The HR and labor management policy should also include a process flow for hiring site employees	Medium	Enhanced HR and Labor Management Policy Compliance monitoring to be included in the Social Monitoring Report	TIPI	Prior to disbursement Semi-annually	Internal staff hours of TIPI incorporated in capital or operations expense.
11	Establish and maintain a grievance redress mechanism to receive and facilitate resolution of affected stakeholders' concerns and grievances about the social and environmental performance at project site. Keep a record of complaints and resolutions; and conduct regular reporting and analysis	Medium	GRM accepted by ADB GRM Register	TIPI	Prior to first disbursement	Internal staff hours of TIPI incorporated in capital or operations expense.
12	Develop and implement a Stakeholder Engagement Plan that will provide framework and guidelines for local SAQ's to implement. Implementation of the SEP should be well documented and should be monitored by the SAQ coordinator.	Medium	Stakeholder Engagement Plan accepted by ADB	TIPI	Prior to disbursement	Internal staff hours of TIPI incorporated in capital or operations expense.
Site/	Social Corrective Actions					
1	Improve the land acquisition process through a more thorough initial screening (e.g., a constraints analysis) of sites	Medium	SAQ Guidance Document or Checklist for social assessment, including due diligence	TIPI	Prior to first disbursement	Internal staff hours of TIPI incorporated in capital or operations expense
2	Enhance the Land Acquisition Protocol which shall consider payment of additional monetary compensation to the market value of land, including for those lots that are not idle lands, improvement losses, and provide a rational measure of the same.	Medium	Land Acquisition Process, including Remuneration Assessment	TIPI	Prior to first disbursement	Internal staff hours of TIPI incorporated in capital or operations expense
3	Conduct of a social impact assessment for sites that are screened to be within ICC/IP Ancestral Domains.	Medium	Inclusion in IEE	TIPI	Prior to construction of sites	[INFORMATION REDACTED] Depending on site location and region

Ref	Corrective Action	Priority	Deliverable	Responsibility	Timeline	Indicative Budget
4	 Enhancement of the capability of SAQ Coordinator to conduct NCIP coordination and the FPIC process, if required. Engage NCIP and undergo the FPIC Process for applicable sites. The following measures are recommended in addition to the FPIC process. TIPI should monitor and report on the progress of the FPIC process. TIPI should conduct determination of impacts (positive and negative) of the project to the CADT holder should be identified. TIPI should determine whether the project can contribute to the Ancestral Domain Sustainable Development and Protection Plan (ADSDPP) of the community 	High	SAQ Guidance Document or Checklist for social assessment, including due diligence FPIC Process - Certificate Precondition and Resolution of Consent	TIPI	Prior to construction of sites	[INFORMATION REDACTED] Inclusive of funding for engagement of NCIP validation
5	Improve their registry of lessor documentation and perform due diligence on aforementioned documents.	High	Enhance or improve TIPI's registry of lessor documentation, consider requiring additional documentation in special cases.	TIPI	Three (3) months after first disbursement	Staff hours internal of TIPI incorporated on capital or operations expense

Appendix

- Appendix 1. Summary of key observations within the proposed project locations
- Appendix 2. Tiger Infrastructure Group Profile & Operational Offices
- Appendix 3. Detailed Design Drawing Check List
- Appendix 4. Preliminary Telco Tower Design
- Appendix 5. Site List Presentation
- Appendix 6. Quality Management System
- Appendix 7. Safety Manual
- Appendix 8. Supplier accreditation process
- Appendix 9. Sample Subcontractor Local Supplier Agreement
- Appendix 10. Sample inspection and testing plan from similar projects
- Appendix 11. TIPI Health, Safety, and Environment Policy
- Appendix 12. Sample HSSE plan from similar projects
- Appendix 13. TIPI Complete SAQ Process Flow
- Appendix 14. Anti-Bribery and Anti-Corruption Policy
- Appendix 15. Anti-Discrimination Policy
- Appendix 16. Anti-Sexual Harassment Policy
- Appendix 17. Permitting Documents Per Site
- Appendix 18. Documents from EPC Contractor

The appendices were deleted as most of the information falls within the exceptions to disclosure specified in ADB's Access to Information Policy (September 2018)