TÜRKİYE EARTHQUAKE RECONSTRUCTION AND RECOVERY PROJECT (TERRP)

ADANA CENTRUM STORMWATER PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

DECEMBER 2025

CONTENT

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ABBREVATIONS

ACM	Asbestos Containing Materials
AoI	Area of influence
ASKİ	General Directorate of Adana Water and Sewerage Administration
DLP	Defects Liability Period
DSI	General Directorate of State Hydraulic Works
E&S	Environmental & Social
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
ESHS	Environmental, Social, Health and Safety
ESCP	Environmental and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESMR	Environmental and Social Monitoring Reporting
ESF	Environmental and Social Framework
EIA	Environmental Impact Assessment
EHS	Environmental Health and Safety
GM	Grievance Mechanism
GIIPs	Good International Industry Practices
GHG	Greenhouse Gase
GoT	Government of Türkiye
ILBANK	Iller Bankası A.Ş.
IOM	International Organization for Migration
IPF	Investment Project Financing
LMP	Labor Management Plan
MoEUCC	the Ministry of Environment, Urbanization and Climate Change
OHS	Occupational Health and Safety
UKOME	Transportation Coordination Center
PID	Project Identification Report
PIU	Project Implementation Unit
RF	Resettlement Framework
QCBS	Quality and Cost Based Selection
RfB	Request for Bids
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SuTP	Syrians under Temporary Protection
TERRP	Türkiye Earthquake Reconstruction and Recovery Project
WB	World Bank
WBG	World Bank Group
WMP	Waste Management Plan
WWTP	Wastewater Treatment Plant

ANNEXES

1. INTRODUCTION

This subproject of "Adana Centrum Stormwater Project" will be financed under Türkiye Earthquake Recovery and Reconstruction Project (TERRP) and will be implemented by ILBANK and financed by World Bank.

The project has been developed in response to the urgent need for infrastructure recovery and development in regions affected by the February 2023 earthquakes, with a specific focus on improving basic services in the Esentepe and Gürselpaşa Neighborhood.

The evaluation of the Adana Centrum Stormwater Project shows a significant shift towards meeting the infrastructure demands posed by the recent population influx following the February 2023 earthquakes. The assessment focuses on the damage incurred against the expected performance of the proposed solutions, emphasizing the importance of upgrading current systems to accommodate increased demand and ensure sustainable service delivery.

In response, the proposed Adana Centrum Stormwater Project aims to transform the existing infrastructure. The upgraded infrastructure will integrate advanced technologies to improve operational efficiency and promote resilience against climate-related events.

The project's main objective is to effectively and safely manage the increasing volume of stormwater within Seyhan and Çukurova District in Adana Province, particularly in the Gürselpaşa and Esentepe neighborhoods. Due to the inadequate stormwater drainage infrastructure, water accumulates during rainy periods, increasing the risk of flooding. The project aims to prevent these accumulations, reduce flood risks, eliminate moist and stagnant environments suitable for fly and pest proliferation, and thereby protect public health. Additionally, the project aims to strengthen the existing infrastructure, which has become inadequate due to increased population pressure following the disaster. The objective is to create safe, healthy, and sustainable urban environments in the settlement areas.

This Environmental and Social Management Plan (ESMP) for this sub-project has been prepared to identify the potential environmental and social risks and impacts of Adana Stormwater Project activities and propose appropriate mitigation measures to manage these risks and impacts related to the improvement of infrastructure in the Esentepe and Gürselpaşa Neighborhood.

The environmental and social impacts of the sub-project in and around the project site are expected to be short-term, manageable/reducible, and mostly reversible.

The following sections of this Plan describe the sub-project site, identify the binding regulations for the development of the Project, identify the environmental and social risks&impacts, and identify the mitigation measures to be taken during the construction and operation phases of the sub-project.

1.1. Objectives of the Environmental and Social Management Plan (ESMP)

TERRP is being implemented under the World Bank's 2018 Environmental and Social Framework (ESF). The Environmental and Social Management Framework (ESMF), Labor Management Procedures (LMP), Resettlement Framework (RF) and Stakeholder Engagement Plan (SEP) prepared for TERRP are available at https://www.ilbank.gov.tr/uidb/turkiye-earthquake-recovery-and-reconstruction-project/accordion/197.

In accordance with the TERRP's Environmental and Social Management Framework (ESMF), the Project Implementation Unit (PIU) under ILBANK has completed the Environmental and Social (E&S) Screening in Annex 2. Based on the anticipated E&S risks and impacts, the E&S Risk Rating has been assessed as "Moderate." Accordingly, this Environmental and Social Management Plan (ESMP) is prepared for the sub-project in detail.

(i) The measures to be taken during the implementation and operation of the sub-project to eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels,

(ii) The actions needed to implement these measures.

This ESMP should be read with the Stakeholder Engagement Plan (SEP) prepared for the Project which is available at: https://www.ilbank.gov.tr/uidb/turkiye-earthquake-recovery-and-reconstruction-project/accordion/197

1.2. Legal and Institutional Framework

The Project will be implemented in accordance with the Environmental and Social Standards (ESS) of the World Bank 2016 ESF, the World Bank Group's (WBG) General Environmental Health and Safety (EHS) Guidelines, Good International Industry Practices (GIIPs), the national legislation applicable in Türkiye and in line with the TERRP ESMF for the Project. In cases where the requirements differ, a more stringent requirement will be applied in the project specification.

The national Environmental Impact Assessment (EIA) is carried out in accordance with the Environmental Impact Regulation of the Environmental Law No. 2872, published in the Official Gazette No. 18132 of 11 August 1983 and subsequently revised in the Official Gazette No. 28661 of 29 May 2013, which constitutes the basic legal framework of environmental legislation in Turkey and is largely in line with the EU EIA Directive. This law is supported by numerous regulations. The Project has been screened in accordance with the latest Turkish EIA Regulation, published in the Official Gazette on 29 July 2022, and it has been determined that the Project does not fall under the scope of the EIA Regulation, as the construction works of sewerage, storm water and drinking water pipelines are not included in either Annex-I or Annex-II of the Regulation.

The World Bank's environmental and social standards will be followed and implemented at all stages of the project, particularly during the mitigation process, as described in the project's ESMF (see link below for ESMF).https://www.ilbank.gov.tr/uidb/turkiye-earthquake-recovery-and-reconstruction-project/accordion/197 .

2. PROJECT DESCRIPTION

Adana Province is located on the east of the coastline of the Mediterranean Sea. Adana Province is surrounded by Mersin and Niğde in the west, by Kayseri in the north, by Kahramanmaraş, Osmaniye and Hatay in the east and by Mediterranean Sea into the south. The area of Adana is 13,844 km^2.

Besides the Central District, Adana has eleven districts. The central districts are Çukurova, Sarıçam, Seyhan and Yüreğir. The other districts are Aladağ, Ceyhan, Feke, İmamoğlu, Karaisalı, Karataş, Kozan, Pozantı, Saimbeyli, Tufanbeyli and Yumurtalık.

The location of Adana is shown in Figure 2-1.

Figure 2-1 Location of Adana

The Adana Centrum Stormwater Project covers areas within the Seyhan and Çukurova districts of Adana Province, both located in the alluvial plains formed by the Seyhan River. The region is predominantly flat, with elevations averaging around 20–25 meters above sea level, and consists mainly of Quaternary alluvial deposits.

Seyhan District lies between Yüreğir to the east, Tarsus to the west, Çukurova (New Adana) to the north, and Karataş to the south. Çukurova District, one of the central districts of Adana, borders the Seyhan Dam Lake to the north and Seyhan District to the south. While Seyhan is largely urbanized, parts of Çukurova still include semi-rural settlements where agriculture and livestock remain active.

The area has a Mediterranean climate, characterized by hot, dry summers and mild, rainy winters. Annual precipitation averages around 640 mm, mainly concentrated in winter months, while annual mean temperatures are approximately 20°C. These climatic and topographic conditions influence stormwater management needs in the region, emphasizing the importance of efficient drainage infrastructure to prevent flooding and ensure climate resilience.

The Adana Centrum Stormwater Project will be implemented within the Esentepe and Gürselpaşa neighborhoods, located in the Çukurova and Seyhan districts of Adana Province, respectively. These neighborhoods are among the rapidly developing residential areas expanding toward the western part of the city and are characterized by increasing housing density and infrastructure development.

Esentepe Neighborhood, situated in Çukurova District, is a well-planned urban area dominated by organized housing complexes and community facilities. Gürselpaşa Neighborhood, within Seyhan District, is a growing residential area that has recently expanded through new housing and urban infrastructure projects. Both neighborhoods are located close to the Adana city center and have well-developed transportation connections.

Under this subproject, a new engineered stormwater drainage system will be constructed to meet the needs of the growing population and address the inadequacy of existing informal drainage routes. The newly designed system will ensure effective collection and conveyance of stormwater, reduce flood risks, and enhance environmental and public health conditions. Upon completion, the project will contribute to sustainable urban development and climate resilience in the Seyhan and Çukurova districts.

Figure 2-2 shows Google Earth views of the neighborhoods where the Adana Stormwater Project will be constructed.

- ***Kıyıboyu Street Stormwater Project***

1.728,67 m (Box-section B=5,0 m, H=3,0 m)

1.319,33 m (Box-section B=4,0 m, H=3,0 m)

TOTAL= 3.048,00 m

- ***Esentepe - Çamalağı Stormwater Drainage Project:***

529,55 m (U-section B=2,5 m, H=2,20 m)

193,56 m (U-section B=2,5 m, H=2,5 m)

705,75 m (U-section B=3,0 m, H=3,0m)

21,06 m (U-section B=3,5 m, H=3,0 m)

633,18 m (U-section B=3,5 m, H=2,5 m)

7 Drop Structure (Total = 80,14 m)

8 Culvert Structure (Total = 649,96 m)

TOTAL= 2813,20 m

Figure 2-2 Google Earth View of the Location of the Project

Earthquakes are displacements in the earth's crust, but they also have important social effects that displace people from their homes. It is indisputable that the earthquakes centered in Kahramanmaraş and its surroundings, which are one of the most talked about natural disasters in world history, will have many political, economic and social effects. It is not difficult to predict that there will be great human mobilizations in the aftermath of large earthquakes of this scale. In the first phase, many people left the region within their means to get rid of the destructive effects of the earthquake. Considering that 2.7 million people migrated within Türkiye in 2021, the volume of human mobilizations that occurred in a few weeks after the earthquake will be better understood. Although it is too early to assess how much of this mobility will be temporary and how much will be permanent, it should be considered that the region's pre-earthquake "migration ability and tendency" may accelerate further.

To preserve the population power and human capital of the earthquake zone, conditions should be created for those who left the region to return to the region after a not long period of time and policies for return should be developed. For this purpose, one of the most important actions to be carried out by municipalities is to reconstruction and rehabilitation of the critical infrastructure facilities such as water, sanitation, stormwater drainage, municipal transport infrastructure, and fire and emergency response services.

The general objective of the project is to ensure that adequate urban infrastructure services are provided in compliance with the national laws/international standards. It is aimed at planning and successfully carrying out the reconstruction of the damage caused by the earthquakes in February 2023.

The primary objective of the Adana Stormwater Project, which was implemented in an area of Adana designated for earthquake victims, is to mitigate the negative impacts of the reduction of green spaces and the accumulation of stagnant water in existing residential areas. Due to climate change and the resulting extension of the summer season and rise in average temperatures in Adana, this problem has been exacerbated, leading to a significant increase in mosquito and pest populations. Residents have frequently reported this situation as a health and quality of life concern.

Furthermore, following the February 2023 earthquake, displaced populations, especially from Hatay and neighboring provinces, have been accommodated in temporary shelters and new housing units. The influx of people has put a strain on the existing infrastructure and reduced the efficiency of the stormwater drainage systems.

The primary objective of the Adana Stormwater Project is to construct new stormwater drainage infrastructure in the Gürselpaşa and Esentepe neighborhoods, located within the Seyhan and Çukurova districts of Adana Province, to effectively address both current and future surface water management needs.

Within this scope, the project aims to collect and safely discharge surface runoff through a technically engineered network designed for efficient and reliable operation. The project involves the construction of masonry-lined open channels to drain surface water in open areas and box culvert structures at road crossings to ensure system continuity. By implementing this system, the project seeks to prevent surface water accumulation, enhance overall drainage performance, and provide residents with a healthier and safer urban environment.

The Adana Stormwater Project aligns with the overarching objectives of the Türkiye Earthquake Recovery and Reconstruction Project (TERRP) by supporting the development of resilient urban infrastructure in earthquake-affected regions.

The subproject consists of two components:

- Construction of the Kıyıboyu Street Stormwater Project, and
- Construction of the Esentepe–Çamalağı Stormwater Drainage Project.

2.1. Existing Situation

Prior to the February 2023 earthquakes, existing drainage structures along the Kıyıboyu and Çamalağı stream corridors identified as part of the stormwater management catchments were either absent, informal, or insufficient to meet the demands of increased surface runoff and urbanization. Some sections of the system consisted of undersized or deteriorated channels, while others relied on natural or irregular flow paths without structural reinforcement, hydraulic control structures, or maintenance provisions.

This situation resulted in several challenges:

- Existing open channels and culverts were inadequate in capacity or partially blocked by accumulated debris and sediment.
- Stream corridors lacked engineered sections to guide and control stormwater flow, leading to erosion, sediment transport, and degradation of adjacent infrastructure.
- In urban areas with expanding residential and commercial developments, the lack of a reliable and integrated drainage network increased flood risks.
- The absence of a well-maintained and structurally sound system hindered effective stormwater management and heightened vulnerability to flood-related damage.
- Unplanned discharges from surrounding developments into natural streams further stressed the already inadequate infrastructure.

The February 2023 earthquakes further aggravated these deficiencies by damaging parts of the already fragile system. Moreover, the ongoing loss of green and permeable surfaces due to intensified urbanization has increased stormwater runoff volumes, exceeding the system's limited capacity.

Therefore, the primary rationale for the interventions proposed under the current project is to address the inadequacy of the stormwater drainage infrastructure within the Kıyıboyu and Esentepe - Çamalağı stream corridors. The objective is to upgrade and expand the existing system to establish a resilient, engineered stormwater management network that enhances hydraulic capacity, reduces flood risks, and ensures service continuity and climate resilience for current and future urban development in the area.

2.1.1. Current Population

The Kıyıboyu Street Stormwater Project and the Esentepe–Çamalağı Stormwater Drainage Project are located within the urbanized districts of Adana Province, addressing critical stormwater management needs in densely populated residential zones.

The Kıyıboyu Street Stormwater Project, situated in the Seyhan District, covers an area where residential and commercial uses are closely integrated. The project area is characterized by high population density, serving and potentially benefiting approximately 112,951 residents including 52,797 in Gürselpaşa Neighborhood, 40,843 in Pınar Neighborhood, and 19,311 in Fatih Neighborhood.

The Esentepe–Çamalağı Stormwater Drainage Project, located within the Çukurova District, focuses on constructing a new engineered drainage network to manage stormwater and prevent flooding in rapidly developing neighborhoods. This subproject will serve approximately 50,467 residents, including 2,370 in Esentepe Neighborhood and 48,097 in Yüzüncüyıl Neighborhood.

Together, these subprojects will strengthen urban flood resilience, protect public health and property, and support sustainable urban development in key residential areas of Adana Province.

2.2. Construction of Kıyıboyu Street Stormwater Project

The existing 3x3 m box culvert along Kuzey Kıyıboyu Street, extending from Pınar Neighborhood to the boundaries of Gürselpaşa Neighborhood in Seyhan District, has become insufficient to accommodate the increasing runoff from its large catchment area. Rapid urban development and the reduction of green and permeable surfaces in these neighborhoods have significantly increased surface water flow, exceeding the hydraulic capacity of the existing culvert.

To prevent potential flooding during periods of heavy rainfall, the construction of a new box culvert parallel to the existing one is planned. The proposed stormwater drainage system (Figure 2-3) is designed to collect runoff from the Gürselpaşa, Pınar, and Fatih neighborhoods and safely discharge it into the existing Bahçeşehir Stream.

The total length of the Kıyıboyu Street Stormwater Project is 3,048 meters, comprising:

- 1,728.67 meters of box culvert with a cross-section of B = 5.0 m, H = 3.0 m, and
- 1,319.33 meters of box culvert with a cross-section of B = 4.0 m, H = 3.0 m.

This newly designed system will expand the hydraulic capacity of the drainage corridor, minimize flood risk in densely populated urban areas, and enhance stormwater conveyance efficiency across the Seyhan District.

Figure 2-3 Google Earth View of the Kıyıboyu Street Stormwater Project

2.3. Construction of Esentepe - Çamalağı Stormwater Drainage Project

The stormwater drainage project covers the route extending from Mehmet Fuat Diblan Street in Esentepe Neighborhood to the highway boundary south of Yılmaz Güney Boulevard within the Çukurova District. Following the February 2023 Kahramanmaraş earthquakes, construction activities and urban development in the project area have increased significantly. This expansion has led to the reduction of green and permeable surfaces, resulting in higher stormwater runoff volumes and increased flood risks.

To address these challenges, the project involves the construction of a new engineered stormwater drainage system (Figure 2-4) designed to collect runoff from the Esentepe Neighborhood and the western part of the Yüzüncüyıl Neighborhood, discharging it safely into the existing culvert. The intervention aims to reduce localized flooding, increase urban drainage capacity, and enhance environmental resilience in accordance with sustainable urban infrastructure principles.

The Esentepe–Çamalağı Stormwater Drainage Project consists of the following structures:

- 529.55 m (U-section, B = 2.5 m, H = 2.20 m)
- 193.56 m (U-section, B = 2.5 m, H = 2.5 m)
- 705.75 m (U-section, B = 3.0 m, H = 3.0 m)
- 21.06 m (U-section, B = 3.5 m, H = 3.0 m)
- 633.18 m (U-section, B = 3.5 m, H = 2.5 m)
- 7 Drop Structures (Total = 80.14 m)
- 8 Culvert Structures (Total = 649.96 m)

Total project length: 2,813.20 meters

Once completed, the system will provide adequate hydraulic capacity to manage runoff from newly developed residential areas, minimizing the risk of surface water accumulation and improving overall urban flood resilience in the Çukurova District.

Figure 2-4 Google Earth View of the Esentepe - Çamalağı Stormwater Drainage Project

Figure 2-5 View of the Existing Culvert

3. ROLES AND RESPONSIBILITIES

The roles and responsibilities of the Contractor, Consultant, ASKİ and ILBANK during sub-project preparation, construction and operation phases are defined in Table 3-1. These roles and responsibilities have been determined for the "Adana Stormwater Project" to be constructed in Adana Province. These roles and responsibilities have been defined to determine the duties of organizations and companies on issues such as environmental and social responsibilities, construction activities, reporting and stakeholder engagement etc. and to comply with these responsibilities.

Table 3-1 Roles and Responsibilities

Roles	Responsibilities
Construction Contractor	– The Contractor shall adhere to its responsibilities specified in this ESMP. – The Contractor will prepare Construction-ESMP and sub-management plans and procedures such as OHS Plan, Traffic Management Plan, Waste Management Plan etc. and submit them to ILBANK PIU/Supervision Consultant prior to construction works. – The contractor will ensure that it is aware of its duties and responsibilities within this ESMP for compliance with national regulation and WB's ESSs. – The construction contractor will employ a full-time occupational health and safety (OHS) specialist, a full-time environmental specialist, and a full-time social specialist to instruct and advise workers on the implementation of the ESMP and the LMP. If required, the contractor should provide additional OHS personnel to ensure adequate supervision during simultaneous or high-risk activities. In case of a serious health incident, such as loss of a limb, death, or any situation requiring hospitalization for more than 3 days, the contractor must report directly to ILBANK within 24 hours through the Monitoring Consultant/PMC (as appropriate), in accordance with the Environmental and Social Incident Response Toolkit (ESIRT) and ESCP guidelines and follow its guidance on the next steps to address the causes of the incident. – In case of any Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH) situation, the contractor must report the case directly to ILBANK within 24 hours through the Monitoring Consultant/PMC (as appropriate), in accordance with the ESCP guidelines. – The Contractor will train its workers on environmental and social aspects (including OHS) in accordance with the WB's ESSs and national regulations to raise environmental and social awareness during the construction phase. – The contractor will establish a grievance mechanism to resolve any issues encountered during the subproject and ensure its operation. It must be ensured that the Grievance Mechanism is accessible, functional, and well managed.

	– The Contractor will establish labor standards, including fair working conditions and non-discrimination, and take measures to prevent behavior that is against the culture of the local people of Adana. – The contractor will manage the flow of labor and employ local workers as much as possible. – The contractor will be responsible for any repairs of newly constructed facilities in accordance with legal regulations from provisional acceptance during the defect liability period. The contractor must implement the measures specified in the Environmental and Social Management Plan for the operation during the liability period. – Monthly and quarterly Environmental and Social Monitoring Reports (in compliance with the outline specified in the ESMF Annex-9) shall be prepared and submitted to the Supervision Consultant to demonstrate the progress of the Project and compliance with ESMP. – The Contractor shall implement the Project-level Grievance Mechanism (GM) and establish a Workers' Grievance Mechanism (WGM) in line with the Project Labor Management Procedures (LMP), ensuring accessibility, confidentiality, and protection against retaliation. – The Contractor shall ensure that all workers sign the Code of Conduct (CoC) prior to commencement of work and receive mandatory training on the Code of Conduct, Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), and the use of the Grievance Mechanism (GM). – The Contractor shall ensure that all SEA/SH-related grievances are handled confidentially, in accordance with survivor-centered principles, and are reported to ILBANK in line with the Environmental and Social Commitment Plan (ESCP).
ASKİ Project Team	– ASKI will coordinate closely with ILBANK's Project Implementation Unit (PIU) to facilitate project implementation. – ASKI will provide technical and administrative support and contribute to sub-project activities as reasonably requested by ILBANK. – ASKI will support the Project Grievance Mechanism established by ILBANK PIU and support its operation effectively to address any public concerns related to the Project. – The ASKI Project Team will attend periodic meetings with ILBANK PIU regarding progress in contract implementation as well as contract modification and contract completion. – On the date of transfer of the Subproject is handed over to ASKI, ASKI will be responsible for the operation and maintenance of the Subproject assets and will assume legal responsibility for any liabilities incurred in connection with the Subproject. – ASKI Project Team will participate in capacity building and training programs provided by ILBANK PIU to enhance the skills and knowledge of their staff related to project management, OHS,

	environmental and social governance (including ESMP requirements, operation of the grievance mechanism, etc.) – ASKI is required to monitor the project activities under their jurisdiction and report to ILBANK PIU regarding progress, compliance and any issues encountered. – ASKI will be responsible for UKOME decisions and other permits to carry out the works if needed under project. – During the defect liability period (DLP), ASKI will notify ILBANK PIU about any identified or reported defects and issues. – ASKI will keep all sub-project assets operational and use them appropriately throughout the life of the sub-project in accordance with applicable laws and regulations after they are handed over by ILBANK PIU. – ASKI will operate and maintain the reconstructed or rehabilitated facilities in accordance with technical, environmental, and social standards. – ASKI will implement the Resettlement Plan prepared by ILBANK. Required expenditures under the Expropriation Law No. 2942 and those mandated by ESS5 that cannot be covered under the Expropriation Law must be covered by ASKİ from its social assistance fund. – ASKI will be responsible for all correspondence regarding chance finds discovered during sub-project construction activities in line with Project ESMF.
Supervision Consultant	– The Supervision Consultant will provide construction supervision services under the project and will control both the technical progress of the construction contract packages and implementation of measures regarding to OHS, environmental and social and administrative scopes. – The Supervision Consultant will be on-site on a daily basis to monitor and supervise project activities. – The Supervision Consultant is assigned to provide regular reporting on the progress of subprojects and their compliance with established E&S standards. This assignment includes collecting data, documenting findings, and coordinating the submission of these reports. – The Supervision consultant consolidates the site inspection findings and review reports submitted by the Contractor's E&S team. After consolidating and reviewing the required reports, the Supervision Consultant will submit them to ASKİ and ILBANK PIU. – The Supervision Consultant will prepare Quarterly Environmental, Social, Health and Safety (ESHS) Monitoring Reports. These reports will be reviewed by the local Project Management Consultant (PMC) before being finalized by ILBANK PIU and submitted to the World Bank. – The Supervision Consultant will ensure that all construction and operational activities comply with the project's environmental and social standards and address any issues that arise regarding compliance.

	– It is the responsibility of the Supervision Consultant to prepare non-compliance forms in case of any non-compliance observed during field inspections and within the reports. – The Site Manager of the Consultant shall inform İLBANK within 24 hours in the event of a serious incident involving loss of life, limb or requiring hospitalization for three or more days. The contractor and consultant are responsible for monitoring and implementing CAP in accordance with ESIRT. – The Site Manager of the Consultant shall inform İLBANK within 24 hours in the event of any situation related to Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH). The contractor and consultant are responsible for monitoring and implementing CAP in accordance with ESIRT. – The Supervision Consultant shall monitor the Contractor's implementation of the Grievance Mechanism (GM), Workers' Grievance Mechanism (WGM), Code of Conduct, and SEA/SH mitigation measures, including verification of trainings and signed Code of Conduct records. – The Supervision Consultant shall ensure that grievances, including SEA/SH-related cases, are addressed in accordance with the Project requirements and reported to ILBANK as required.
General Directorate of ILBANK	– ILBANK will act as the PIU under the Department of International Relations, which will be responsible for managing and implementing the project. – ILBANK will oversee the entire implementation process of the subprojects ensuring that all project activities comply with the World Bank's environmental and social standards. – ILBANK will monitor project compliance with the Environmental and Social Commitment Plan (ESCP) and ensure that the project is implemented in accordance with the Environmental and Social Management Framework (ESMF) and other relevant documents of ILBANK. – ILBANK will ensure preparation of the required environmental and social documents such as the Environmental and Social Management Plan (ESMP), Resettlement Plan and Stakeholder Management Plan. – ILBANK will ensure that a Grievance Mechanism for the project is established and operates effectively throughout the life cycle of the project. – ILBANK is responsible for the satisfactory implementation of the subproject, including environmental and social performance. – ILBANK will monitor the performance of the construction contractor, ASKI Project Team and Supervision Consultant with respect to ESHS compliance. – ILBANK will review the quarterly reports of the contractors during the construction phase. ILBANK will inform the World Bank by submitting regular semi-annual monitoring reports on the project's ESHS performance.

	– ILBANK will be liaising with ASKI on environmental, social, and technical issues related to the implementation of the subproject and ensure ASKI participates in the process and embraces the project. – In case of any environmental and social non-conformities related to the contractor's work, ILBANK PIU will instruct the 'Contractor' to rectify these non-conformities. The adequacy of the Contractors' measures will be assessed by the ILBANK PIU. – ILBANK PIU shall ensure the establishment and effective operation of the Project-level Grievance Mechanism (GM), including provisions for confidential handling of SEA/SH-related grievances. – ILBANK PIU shall oversee compliance with Code of Conduct and SEA/SH requirements, monitor reported grievances, and ensure timely reporting in line with the ESCP. – ILBANK PIU shall ensure that adequate capacity building and training on the Grievance Mechanism (GM), Code of Conduct, and SEA/SH are implemented and monitored throughout the Project lifecycle.

4. ENVIRONMENTAL AND SOCIAL ASSESSMENT

Considering the short term and localized environmental and social impacts, this subproject is categorized as Moderate Risk as the Risk Screening conducted under World Bank ESF.

According to WB ESSs, "where the project involves specifically identified physical elements, matters and facilities that are likely to create impacts, environmental and social risks and impacts shall be identified in the context of the project's Area of influence (AoI)." Thus, the AoI of the project consists of urban areas likely to be affected by the project, its activities and facilities that are directly owned, operated, or managed (including by contractors). Project AoI consists of the environmental and social aspects within the following: Project site and project access roads.

During construction and operation phases of the Project, environmental and social impacts caused by project activities may arise. Any potential impact of the Project during the construction phase would be generally short term with low to medium magnitude that would be locally significant. These impacts would mostly be related to traffic, noise, vibration, air quality, soil disturbance and contamination, waste management, community health and safety, and labor and working conditions (including occupational health and safety) and temporary disruptions in public service.

The project aims to construct critical infrastructure facilities such as stormwater drainage, water, sanitation, and sewerage systems in earthquake-affected areas, particularly within the Seyhan and Çukurova Districts of Adana Province. The subprojects will not require any land acquisition, as all construction activities are planned within existing public land or designated infrastructure corridors.

Kıyıboyu Street Stormwater Project:

- The project route follows the DSI canal. Therefore, a crossing permit has been obtained from the DSI. The relevant letter is provided in Annex 1.

Esentepe–Çamalağı Stormwater Drainage Project:

At kilometer 2+700.00 of the project route, the area lies outside registered cadastral boundaries and is currently fenced with wooden barriers. To clarify the status and authorized use of this land, an official inquiry was submitted to Çukurova Municipality. The response letter received from the municipality confirming the area's current status is provided in Annex 4.

Service Road:

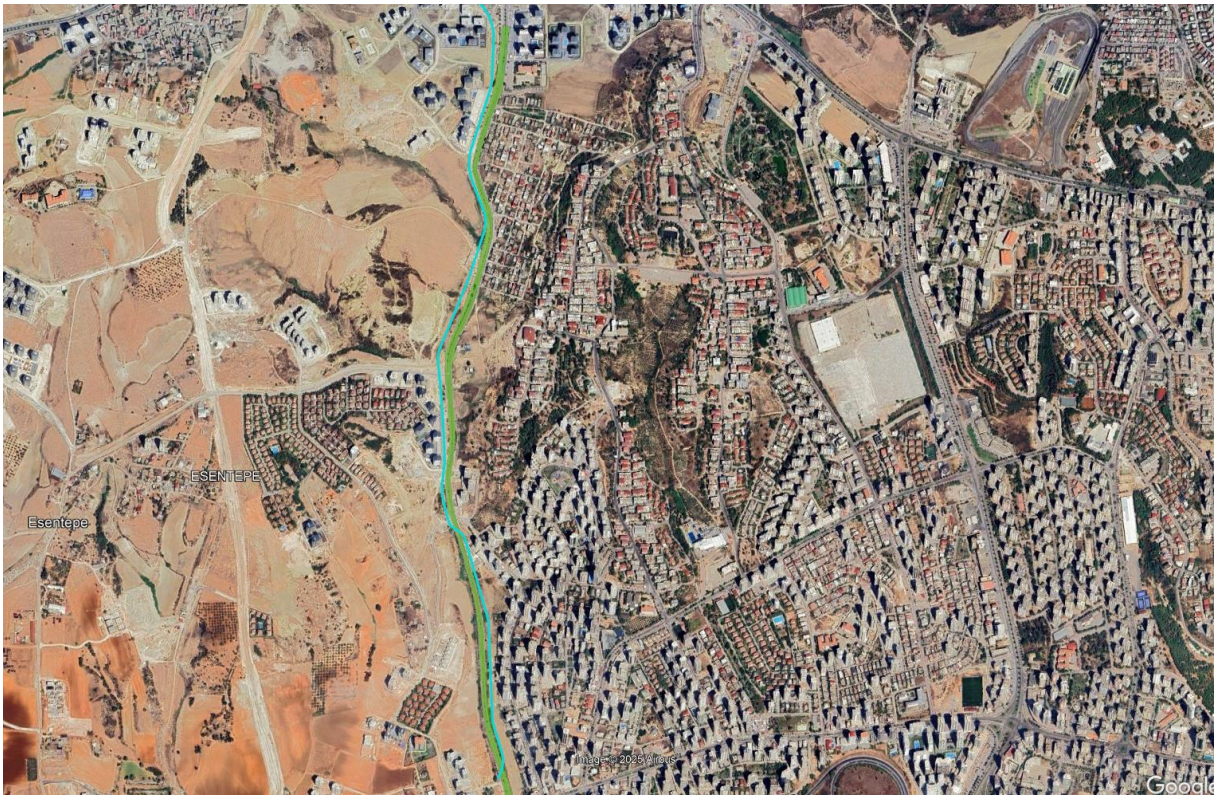
Regarding the Esentepe-Çamalağı Stormwater Drainage Project, which is part of the Adana Central Stormwater Project, the General Directorate of State Hydraulic Works (DSİ) stated in its approval letter that service roads should be arranged as needed to ensure the sustainable operation and maintenance of the flood control facility. The DSİ letter clearly states that an operation and maintenance road with a minimum width of six meters must be arranged on one or both sides of the flood control facility to allow for mechanized work when necessary. (Annex 5).

- The requirements for the service road will be determined based on the criteria specified in the DSİ technical document following field inspections conducted by the Adana Metropolitan Municipality's technical teams. The technical teams will identify on-site

the points where the construction of the service road is mandatory or where access is required for maintenance and repair purposes, in accordance with DSİ criteria. The fundamental principle in all local surveys will be to avoid crossing private property parcels. Service road arrangements will be planned using public areas, existing road corridors, or areas currently in public use along riverbanks, whenever possible. No action will infringe on property rights.

- As stated in the DSİ letter, there are existing roads on both sides of the stream route throughout a significant portion of the project area. These roads currently meet access and maintenance needs. Therefore, service road arrangements will only be made in areas where there is a need, a break in continuity, or where machine access is impossible.

Figure 4-1 Service Road



In Figure 4-1, the service road following the route alongside the main alignment is shown in green color. In this context, the existing main road will also be used as the service road, with a total length of approximately 2.5 km.

Figure 4-2 shows the section where the service road is required. The service road works will be carried out in accordance with the zoning plan and without entering private land, as verified by the municipality on site.

Figure 4-2 Section Without Asphalt Roads

In addition, the conclusion that no land acquisition is required for the service road and sub-project is based on field visits conducted along the planned right of way (RoW), as well as desk-based studies. During these inspections, the service road alignment and the surrounding area were examined to verify the existing land use, ownership status and physical conditions. These observations were supported by reviews of project design documents, zoning plans and available cadastral information. The assessments confirmed that the service road alignment remains within existing public road corridors and publicly used areas without encroaching on private land.

Based on assessments of the service road alignment, it has been determined that most of the route will pass through the existing main road corridor. Accordingly, the service road will utilize the current road network. Therefore, no additional land acquisition, construction of a new access route, or intervention into private property is required along the alignment.

Only a limited section near the endpoint of the route lacks asphalt pavement. In this segment, access will be provided through existing stabilized ground (non-registered public land), and all work will be conducted within public land boundaries, without entering any private property. This approach minimizes environmental and social impacts while preventing the need for land acquisition under ESS5.

Consequently, the determination of the service road requirement will be carried out only at points deemed necessary, while considering the technical requirements of the State Hydraulic Works (DSİ) and the World Bank's social and environmental standards, minimizing property and environmental-social impacts.

Potential environmental and social risks of the Project activities have been identified as follows:

4.1. Air Quality

Construction Phase: The major impacts on air quality during the construction phase of this project will be related with the material handling, vehicle movement, excavation and backfilling, compaction works and emissions from heavy construction machinery (trucks, excavators, etc.).

Air pollution will be mainly dusting emissions and exhaust emissions as well as Greenhouse Gas (GHG) emissions. Considering the location of the project area, it is not expected that sensitive receptors will be affected. During the construction phase of the project, impacts on air quality will be mainly due to dust, exhaust and GHG emissions caused by:

- Dust emission during the site preparation, excavation, backfilling, and compaction works performed for the construction works.
- Dust emission due to the vehicle movement for transportation of various construction materials to the project site.
- Exhaust emissions originate from vehicles used in construction activities.
- GHG emissions are generated from vehicles and machinery in small amounts.

These air quality impacts will be limited in terms of area and short-term since there will be a limited amount of equipment and machinery operating on site. In addition, the network will follow the cadastral roads, and the construction will be performed gradually.

Sub-project's environmental impacts at AoI are limited to the footprint and these impacts are effective for limited time during construction phase. In the event of complaints regarding air quality, air quality measurements will be made for the impact area.

Operation Phase: No activities that could be considered impacts on air quality are expected during the operation phase of the sub-project except for the repair and maintenance activities that will be local and short termed.

4.2. Noise

Construction Phase: Noise will be generated from vehicles, machinery and equipment that will operate during the construction activities of the sub-project. The equipment and machines used during the construction will be monitored and maintained at regular intervals. In case of complaints regarding noise, noise measurements will be made for the impact area and alternative working arrangements developed in order to lower the noise to legally prescribed limits..

Operation Phase: No activities that could be considered as a noise source are expected during the operation phase of the sub-project except for the repair and maintenance activities that will be local and short termed.

4.3. Water Resources and Wastewater

Construction Phase: During the construction phase, there will be no crossing over any surface water body, stream, river, or dry riverbed along the pipeline route. Additionally, no groundwater was encountered in both components in the boreholes drilled and the test pits dug in the study area. However, there will be water supply requirements to meet the needs of employees and to

prevent dust emissions. The drinking water needs of the employees will be met with bottled water, while the domestic water needs will be provided by the existing network or tanker truck depending on the campsite. Wastewater from the personnel will be collected via an existing sewerage network if available or will be collected in a leak-proof septic tank and portable toilet. Water to be used for dust suppression and washing water will be brought to the project area by truck. The quality of the water to be supplied to the Project for employees will comply with the WB's ESSs and the Regulation on Water Intended for Human Consumption. Minor short-term negative impacts due to surface runoff, muddy water filling the excavation trenches, etc. would occur during construction. Construction activities may also pose the potential for release of petroleum-based products, such as lubricants, hydraulic fluids, or fuels during their storage, transfer, or use in equipment. Spill kits will be available on site for any spill risks, and leak-proof pans should be placed under the drums where oil is changed. It is not expected to have any fuel storage since gas stations are available near the project area.

Operation Phase: Since there is no daily water use related project during the operation phase there will be no impact on water resources and no wastewater generation during the operation phase.

4.4. Waste Management

Construction Phase: During the construction phase of the Project, activities such as excavation, procurement, transportation and assembly of units and equipment will be carried out. Solid waste types expected to be generated within the scope of these activities are domestic wastes, packaging wastes of system equipment (e.g. wood, cardboard, plastic, etc.), hazardous wastes, special wastes, excavation, and construction wastes (e.g., plastic shavings, scrap metal, wood, concrete waste, etc.).

Domestic Solid Waste: Domestic solid waste will be generated from the personnel who will work during the construction phase of the sub-project. The domestic solid waste generated will mostly consist of organic waste. The domestic solid waste generated will be stored in available trash containers and collected by the district municipality via garbage trucks. The waste collected will be delivered to licensed solid waste landfills.

Packaging Waste: Packaging wastes made of plastic, metal, glass, paper and board, composite and similar materials should be collected separately from other wastes and given to Packaging Waste Collection, Segregation and Recovery Facilities licensed by the MoEUCC.

Excavation and Construction Waste: In accordance with the Regulation on the Control of Excavation Soil, Construction and Demolition Wastes, excavated soil and construction waste producers are responsible for the transportation of the excavated soil and construction waste generated to the storage areas that have necessary permissions, using transportation vehicles with the necessary transportation permits. The excavation soil and construction wastes generated during the construction phase of the sub-project will be transferred to the permitted landfill belonging to the Adana Municipality. Excavated soil suitable for reuse will be temporarily stored within the construction site in designated areas for use as backfill material. Temporary storage areas will be clearly demarcated, located away from water bodies and drainage channels, and managed in a manner that prevents erosion, dust generation, and runoff. The stored material will be reused as backfill as soon as practicable, in line with construction progress. Any excess excavated soil or construction waste that cannot be reused will be

transported to licensed disposal sites. A similar procedure will be followed during the repair and maintenance process, if required, as well.

Hazardous Waste: During the construction phase of the sub-project, petroleum-based products, such as lubricants, hydraulic fluids, or fuels, may result in the potential for release into the environment during storage, transportation, or use of equipment. Additionally, contaminated / oily fabrics, cloths and filters, contaminated packaging materials, toner cartridges, paint residues, fluorescent tubes, cleaning cloths and filters, hazardous insulating materials and pressurized tubes are other hazardous wastes that are likely to be generated. Hazardous wastes that are likely to be generated during the construction phase will be collected separately in specific vessels / containers at the construction site and stored in a specific area that is established on the concrete floor with secondary containment and connected to the drainage channel to prevent it from reaching the ground or other bodies of water. A roof or overhead cover will be provided for the hazardous waste storage area to protect waste containers from rainwater exposure, thus preventing spills, leaks, and environmental pollution while safeguarding workers' safety. Additionally, prevailing wind directions will be considered when designing the storage area to prevent the dispersal of particulate matter, dust, or contaminants, thereby reducing health risks to workers and the environment. The waste generated should be temporarily stored at their source in line with the criteria set based on their types. The temporarily stored waste will be labelled with the phrase 'hazardous or non-hazardous waste' as well as the waste code, the amount of waste stored and the date of storage. Waste will be delivered to licensed disposal / recycling facilities with separate waste codes. Hazardous waste will be transported by licensed vehicles within the scope of the "Communiqué on the Waste Transportation by Road".

Waste Batteries and Accumulators: Waste batteries will be collected separately in waste battery bins. The collected waste batteries will be delivered to the Portable Battery Manufacturers and Importers Association (TAP) (authorized waste battery collector) for disposal at the licensed facility. These wastes will be handled in accordance with the procedures and principles of the Regulation on the Control of Waste Batteries and Accumulators. If not handled properly, these wastes can have an adverse impact on human health and the environment.

Medical Waste: During the construction phase, medical waste will be generated from first aid responses. According to the Regulation on Control of Medical Waste, medical wastes stored in specific containers and areas will be collected by licensed vehicles and delivered to licensed disposal companies. It is expected that the medical waste generated during the construction phase will be in very small amounts due to first aid actions. While the generation of medical waste is expected to be in trace amounts, they can lead to significant effects such as contracting infectious diseases if not handled properly.

Operation Phase: Maintenance and repair activities may generate waste materials that require proper disposal. Waste generated during maintenance and repair activities should be segregated into different categories based on their type and potential for reuse or recycling. This can include categories such as hazardous waste, recyclables, and non-recyclables. Each category of waste should be disposed of in the appropriate manner, according to national regulation.

4.5. Biological Environment

Construction Phase: In the construction phase of the project, some direct or indirect impacts are expected to occur on biological environment and natural assets. One of the primary concerns is the potential loss of trees (As a result of the investigations conducted along the project route, it is estimated that approximately 40 trees will need to be cut down. The trees to be cut down are palm trees and pine trees. These trees are located on DSİ plots, not on privately owned plots.) located along the proposed stormwater drainage line. As part of the excavation and construction activities, it will be necessary to remove certain trees that are situated directly within the project alignment. So, any trees located along the project route must be relocated using the appropriate method and in accordance with the DSİ recommendations. This may lead to localized habitat loss and a minor reduction in urban biodiversity.

However, the project area is largely within an urbanized zone and not officially designated natural or ecologically sensitive areas exist along the project route. As such, the overall impact on the biological environment is “Low ”.

Operation Phase: No impact is expected on the biological environment during the operation phase of the project.

4.6. Cultural Heritage

Construction Phase: Since there are no tangible cultural heritage assets near the sub-Project area, no impact is expected on the existing cultural assets. If any chance find is encountered during the construction activities of the Project, the Chance Find Procedure will be implemented which is given Annex-7. In case of chance findings, the contractor will immediately inform supervision consultant, ILBANK as well as Adana Museum Directorate and take the necessary actions.

Operation Phase: During the operation phase, it is not expected to come across with chance finds.

4.7. Climate Change

Construction Phase: The Project’s contribution to climate change during the construction phase will be due to the emission of GHG. The majority of greenhouse gas emissions will be due to construction machinery/equipment usage. The major greenhouse gas emission will be CO2 emissions resulting from the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of methane and nitrous oxide will also be emitted during fuel combustion. Therefore, these emissions will contribute to climate change.

The project’s contribution to climate change through GHG emissions is assessed as a negative and direct impact. The impact’s extent will be regional, and duration will be short-term. Although the sensitivity of the receptor is considered medium, due to the usage of small number of construction machinery/equipment, the significance of the impact is considered low.

Operation Phase: The project’s contribution to climate change during the operation phase will be similar to the one explained for the construction phase and the significance of the impact will be low. In the operation phase, usage of fossil fuel burning equipment/machinery usage will be limited.

As a result, GHG emissions generated during land preparation, construction and operation phases of the project can be considered as relatively short-term emissions. With the realization of proper mitigation measures, GHG emissions can be minimized.

4.8. Community Health and Safety

Construction Phase: Since the project will be implemented in residential areas, the project may have social impacts, including temporary disturbances such as noise, dust and traffic congestion; restricted access to residences and businesses; and disruption to daily activities. To mitigate the impacts, stakeholder engagement activities will be implemented. The construction works to be carried out for the sub-project works will have a short-term and temporary effect. No displacement or Land acquisition is required for the sub-project. Therefore, it is not expected that vulnerable/ disadvantaged individuals/groups within the sub-project's area will be permanently negatively affected by the sub-project. Throughout the sub-project's lifespan, it is crucial for stakeholders to have information about the project's route, duration, and alternative passages. Additionally, all construction sites in the urban areas will be fenced with solid fences or barriers to prevent incidental access of community members into ongoing construction works. Special efforts should be made to identify disadvantaged and vulnerable stakeholders who might be affected differently or face challenges in participating and engaging in the development process. Stakeholder identification is an ongoing process that will require regular review and updates.

Since the project will be implemented in residential places, there is a risk of SEA/SH. All workers will sign/commit to and will be trained on the Code of Conduct, GBV and SEA/SH to manage the potential adverse impacts on social cohesion and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risks. All workers have to sign a Code of Conduct. The GM that will be in place for the project staff will also be used to address SEA/SH related issues and will have mechanisms in place for secure and ethical documentation of SEA/SH issues and confidential reporting. During the construction phase, consultations with stakeholders will take place, allowing for the creation of special passages for vulnerable/disadvantaged individuals or groups, such as the elderly, pregnant women, young children, and disabled individuals, by implementing additional measures. Given that the work will be conducted in publicly accessible areas, public access to these areas will be restricted in any way necessary. The contractor will ensure that the area is adequately lit, appropriate signage is provided, and barriers are installed.

Operation Phase: During the operation phase, no negative impact is expected. On the contrary, since the community in the project area will have clean water and sanitation system, the impact will be positive.

4.9. Traffic Management

Construction Phase: During the construction phase, risks will arise due to closing roads and additional vehicles to be used for the construction. Moreover, pedestrian safety risk may arise as well. However, the impact will be limited and temporary. The Contractor shall provide an alternative route for the vehicle and arrange its work program accordingly. Where it is not possible, the road will be made usable as soon as possible. For pedestrians, temporary passages will be provided where necessary. Before closing a road for the works, permits will be obtained by the contractor, and the stakeholder will be informed. On construction site necessary traffic signs and physical direction of the traffic flow will be provided.

Operation Phase: No negative impact is expected related to traffic management during the operation phase of the project.

4.10. Labor Management

It is anticipated that approximately sixty personnel will be employed during the construction. Since the project will be implemented in various neighborhoods of Adana, accommodation facilities might not need to be installed. However, if it is required to install containers, containers can be placed on the sub-project area for those who will work on the sub-project to accommodate, rest, eat and also for sanitary facilities. These containers will meet standards for worker accommodation prepared by the International Finance Corporation (IFC) and European Bank for Reconstruction and Development (EBRD) and approved by the WB. On the other hand, in the settlements that are expected to be affected during the construction phase of the sub-project, no negative impact induced by the sub-project is anticipated regarding the population level. Any work permits for the workers employed as part of the sub-project will be followed by ASKİ, and recruitment will be carried out within the framework of legal practices. Recruitments will be performed by checking the legal work permits to meet the labor conditions during construction and operation periods.

The provisions of the existing Project-level Labor Management Procedures (LMP) will be fully implemented for this sub-project. The Project-level LMP includes measures related to the prevention of child labor, forced labor, nonregistered worker employment, sexual exploitation, and abuse / sexual harassment to prevent and eliminate risks. The subproject does not involve the use of any goods and equipment, which involve forced labor, child labor, or other harmful or exploitative forms of labor. The labor and working conditions of the supply chain will be ensured to comply with ESS2 through bidding and contract documents for the procurement of goods and equipment.

A workers' grievance mechanism for the employees should be established. Employees will be able to express and demand their needs and concerns without the fear of retaliation. Anonymous applications will also be possible. Employees will be able to direct their grievances in topics including but not limited to accommodation, food, sanitation and OHS risks and Personal Protective Equipment (PPE).

All workers will sign and commit to and will be trained on the Code of Conduct to manage the potential adverse impacts on social cohesion and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risks.

4.11. OHS Risks and Measures of Subproject Activities

As required by both Turkish National Law and WB Group Health and Safety Guidelines, all general and sector specific OHS hazards / risks will be adequately identified, addressed, and managed throughout the construction(Excavation work, pouring concrete, backfilling, manufacturing reinforced concrete and various ironwork), operation, and decommissioning phases, including those arising from excavation works, trenching activities, shoring/ground support systems, and other high-risk construction tasks.

- Subproject-specific OHS Management Plan, Emergency Preparedness and Response Plan, Traffic Management Plan, Incident Investigation Reporting Procedure, and a comprehensive Permit to Work (PTW) Procedure will be prepared and submitted to

consultant and ILBANK for review and approval prior to start of site mobilization. The PTW system will clearly define the scope of activities requiring permits, roles and responsibilities of authorized personnel, hazard identification and control measures, permit approval and closure procedures, and communication protocols. The Contractor must establish this site-specific PTW system in accordance with national OHS legislation and ILF/WB requirements to ensure that all high-risk activities are properly authorized, monitored, and controlled.

- As a part of the preliminary work, a sub project specific risk assessment document will be prepared by OHS professionals assigned to the project.
- The OHS Training Plan will cover the topics and scheduling of the OHS training and will be in line with local legislation.
- In line with the Traffic Management Plan all project personnel will receive safe driving courses. Special emphasis will be given to community safety to prevent road / traffic accidents in these training courses since the roads will be commonly used with the local community. The Contractor will also develop and implement location-specific traffic management arrangements for each work area, including clearly defined pedestrian–vehicle segregation routes, visible and durable signage, trained flagmen at critical interface points, and activity-based traffic control plans, in order to ensure full compliance with national OHS legislation and ILF/WB requirements and to minimize risks to both workers and the surrounding community.
- Unauthorized access to the project site will be prevented by fully fencing the active construction sites and premises and employing security personnel on a 24-Hour basis. Hazard communication will be made adequate number of safety signs complying with respective Local Law. For night works and open trenches during nighttime, the Contractor will implement additional control measures, including adequate lighting, illuminated warning signage, reflective barricades, and continuous monitoring, to further prevent unauthorized access and ensure the safety of both workers and the surrounding community.
- PPE complying with respective TS/EN standards will be selected and provided to workers with necessary training about when and how to use them. In addition, the Contractor will develop detailed, activity-specific PPE requirements defining the type of PPE needed for each task, applicable standards, proper usage instructions, as well as inspection, maintenance, and replacement procedures in alignment with local OHS regulations and ILF/WB standards to ensure adequate protection against all task-related hazards on site.
- Special Tasks such as cutting, welding, confined space entry, excavation works, and lifting operations will be performed only with a work permit system in place.
- Administrative measures such as readjusting the working hours / shifts will be done in case extreme weather conditions occur during the project.
- Sufficient facilities and equipment will be provided on construction sites for first aid in case of an injury since the work sites are in remote locations. Regular drills including basic firefighting and evacuation of the injured personnel will be made to ensure emergency preparedness. In accordance with national OHS legislation and ILF/World Bank requirements, the Contractor shall also ensure the presence of a sufficient number of certified first aiders on site. At least one certified first aider shall be present at all

times for each critical activity, and the availability and certification status of all designated first-aid personnel must be documented and kept up to date.

- No asbestos-containing materials have been found in the area where the project will be constructed. However, if asbestos is encountered during construction, the Contractor will prepare an Asbestos Management Plan that as stated in the Annex-5 under section of 'waste management' of the TERRP ESMF.
- Slip, trip, and fall risks will be managed by maintaining good housekeeping across all work areas, ensuring that walking and working surfaces are kept clean, dry, and free of debris. All access routes, platforms, and work zones will be equipped with adequate lighting, clearly marked walkways, and anti-slip surfaces where necessary. Uneven ground, open pits, and changes in elevation will be visibly marked and protected with barriers or warning tapes. Tools, cables, and materials will be organized to prevent clutter, and workers will receive training on recognizing and avoiding slip–trip–fall hazards. Appropriate PPE such as slip-resistant footwear will be provided in accordance with TS/EN standards.
- Confined space entry will be strictly controlled under the Permit-to-Work (PTW) system. Before any entry, atmospheric testing will be conducted to check oxygen levels, flammable gases, and toxic contaminants, and continuous ventilation will be ensured where required. Only trained and authorized personnel will be allowed to enter confined spaces, and a designated standby attendant will remain outside the entry point at all times to maintain communication and initiate rescue procedures if needed. Appropriate PPE such as gas detectors, harnesses, and respiratory protection will be provided in accordance with TS/EN standards. Rescue equipment will be readily available, and a confined space specific emergency plan will be implemented to ensure safe and compliant operations.
- All electrical works will be carried out in accordance with TS/EN electrical safety standards and national OHS legislation. Only trained and authorized electricians will be permitted to perform electrical installations, repairs, or live work. A Lockout Tagout system will be implemented to ensure energy isolation during maintenance and repair activities. All temporary electrical panels, cables, and connections will be protected against weather conditions, mechanical damage, and unauthorized access. Regular inspections will be conducted to identify worn-out cables, faulty grounding, overloaded circuits, or exposed conductors. Workers will be provided with appropriate PPE such as insulated gloves, dielectric boots, and arc-flash–rated equipment when required, ensuring safe work practices across all electrical tasks.
- Noise and vibration exposure will be controlled through a combination of engineering and administrative measures. Regular noise and vibration level measures will be conducted to ensure compliance with national regulations and WB EHS Guidelines. Equipment generating high noise or vibration will be fitted with silencers, damping systems, or isolation mounts where applicable. Workers exposed to elevated noise levels will use hearing protection compliant with EN 352 standards, and exposure durations will be limited through job rotation and scheduled breaks. Vibration risks from handheld tools or heavy machinery will be minimized by selecting low-vibration equipment, maintaining tools regularly, and providing training on early symptoms of vibration-related health effects. Appropriate buffers or barriers will be installed when activities take place near sensitive receptors such as residences, schools, or health facilities.

- Manual handling tasks will be assessed and controlled to prevent musculoskeletal injuries and physical strain. Heavy or awkward loads will be handled using mechanical lifting aids such as hoists, trolleys, or forklifts whenever possible. Workers will receive training on proper lifting techniques, including maintaining neutral postures, avoiding sudden movements, and team lifting when necessary. Workstations will be arranged ergonomically to minimize repetitive motions, twisting, or overreaching. Manual handling activities will be included in task-specific risk assessments, and limits on maximum manual load weights will be enforced in accordance with national OHS regulations and WB EHS Guidelines.
- The Emergency Preparedness and Response Plan will outline site-specific emergency scenarios such as fire, explosion, medical incidents, confined space rescue, trench collapse, severe weather, and traffic accidents. Clearly marked emergency assembly points, evacuation routes, and communication procedures will be established and maintained throughout the project site. Emergency equipment including fire extinguishers, spill kits, first-aid supplies, and rescue gear will be readily accessible and regularly inspected. Trained emergency response teams will be designated, and all personnel will participate in periodic drills to test readiness and ensure effective response capabilities. Coordination with local emergency services will also be maintained to ensure rapid assistance when required.

During the operation phase of the project, repair and maintenance works might be held. Main sources of the hazards during the operation phase that may be present include but not limited to.

- Vehicle operations including local traffic,
- Moving machinery and equipment,
- Chemicals,
- Hand and Power Tools,
- Electrical works and associated energy isolation hazards,
- Excavation works for repair or replacement activities,
- Welding and hot work operations,
- Lifting / Rigging operations,
- Extreme Weather Conditions.

5. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN MATRIX

Table 5-1 represents the Environmental and Social Management Plan (ESMP), outlining the necessary measures for the Contractor, Supervision Consultant and ILBANK to adhere to during the sub-project activities.

This plan encompasses anticipated environmental and social risks and effects specific to the sub-project, along with recommended mitigation measures. It details the stages where these risks/effects are expected to occur, indicators within the monitoring system, frequency, and responsibilities. The contractor will include the cost of the implementation of the mitigation measures in its proposals. ILBANK will reserve an adequate budget for the measures that are under its responsibility from the project management component. This ESMP comprehensively defines the strategies to address these risks/effects throughout the project timeline.

The contractor will prepare its ESMP (C-ESMP) to show how it will implement the specified measures given in Table 5-1. This C-ESMP will be reviewed by the supervision consultant and then will be approved by ILBANK after all necessary revisions are made. The Contractor will establish an effective system for managing and monitoring E&S matters related to sub-project activities which will be also included in the C-ESMP. The effectiveness of the implementation of the measures, the Contractor's organizational structure, and the monitoring plan to be implemented by the Contractor will be monitored by the supervision consultant.

All the implementing parties specified in Table 5-1 will carry out their own self-monitoring processes. In addition, the supervision consultant will supervise the activities implemented by the contractor and ILBANK will monitor the activities of the contractor and the supervision consultant.

Table 5-1 Environmental and Social Impact Management Plan for Planning, Construction and Operational Phases

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
GENERAL										
Environmental and Social Management	The Contractor ESMP (C-ESMP) will be prepared and submitted to PIU for approval and subsequently implemented by the Contract/Subcontractors. The C-ESMP should be submitted prior to the commencement of construction works and no construction activities will be carried out under the subproject until approval of the C-ESMP. The C-ESMP will include the following site-specific management plans as relevant to the subproject: • Air Quality Management Plan • Noise Management Plan • Waste Management Plan • Hazardous Material Management Plan • Spill Management Plan • Water Resources Management Plan • Soil Pollution Management Plan • Hazardous Material Management Plan • Traffic and Safety Management Plan • Community Health, Safety and Security Plan	X	X		C-ESMP will be approved prior to construction and implemented throughout the construction period.	X			Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)* ASKİ *(supports PIU where necessary)*	Included in Works Contract

[1] The costs cannot be fully determined at this stage. They will be calculated for each activity in the activity specific ESMPs.

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Labor Management Plan (to be prepared in accordance with project LMP) • Accommodation Management Plan • Occupational Health and Safety (OHS) Management Plan • Emergency Preparedness and Response Plan and • Incident Investigation Procedure • PTW Procedure • Asbestos Management Plan • Sexual Exploitation and Abuse / Sexual Harassment Action Plan • Grievance Mechanism • Stakeholder Engagement Plan									
Reporting of Environmental and Social Performance	• The ESHS performance of the subprojects will be monitored by the responsible contractor' E&S and OHS teams of the Contractor on a daily basis and the team will report the site findings on a monthly basis to the supervision consultant for review. • The supervision consultant will check and add their site inspection findings and submit the consolidated monthly monitoring reports to İLBANK PIU. • These reports will be sent to the Supervision Consultant by the Contractor for submission to ILBANK within the first week of the month following the period covered by the Report.		X		Visual inspection Records of the monthly monitoring reports Records of complaints Number of Non-compliance		X		Contractor Supervision Consultant PIU	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• ILBANK will submit Monthly Environmental and Social Monitoring Reports (ESMR) to WB as an annex of the semi-annual progress reports.									
Permissions	• All necessary permits/consents/approvals (including construction permits) will be obtained in accordance with the national legislation (e.g., environmental permits and licenses). • Before the excavation works start, necessary permissions will be obtained from the relevant institutions (DSİ) and organizations in order not to damage the existing infrastructure (telephone, electricity and drinking water etc.) along the route where the stormwater network will be constructed, and infrastructure routes will be determined. • The subproject components will be designed, constructed, and operated in accordance with the Turkish regulations and standards for protection against seismic activity. Building Earthquake Regulation (O.G. date/no: 18.03.2018/30364) will be complied with during all construction works. • Within the framework of the Traffic Management Plan, permits for road closure and alternative transport routes to be taken for excavation works will be obtained from the relevant institutions (DSİ) and then construction works will be started. . In addition, measures will be implemented to coordinate the movements of multiple vehicles, construction machinery, and equipment from	X	X		Records of all permits obtained	X			Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)* ASKİ *(supports PIU where necessary)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	different contractors operating in the same area, in order to prevent interference, congestion, and potential hazards. This coordination is essential to ensure safe and efficient site operations in compliance with local OHS regulations and ILF/WB requirements. • For streets where road closure permits have been obtained prior to the start of construction works, local residents will be informed by the Social Expert of the Contractor about the road closure and the details of the work plan.									
Spills/accidents and Contaminated Land	• The storage of chemicals, hazardous materials, and other potential contaminants will be kept to a minimum as feasible through inventory management in order to reduce or eliminate the potential onsite and off-site consequences of releases due to accidental and emergency incidents. • Drummed hazardous materials with a total volume equal to or greater than 1,000 L will be stored in areas with secondary containment and impervious floors that are sloped or beamed to contain a minimum of 25% of the total storage volume. Drip trays will be used for fueling mobile equipment. • Appropriate secondary containment structures consisting of berms, dikes, or walls to contain at least 110 percent of the largest tank or 25% percent of the combined tank volumes will be provided at tank farms		X		Visual inspection Records of incident and the disposal of contaminated soil		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	with above-ground tanks with a total storage volume equal to or greater than 1,000 L. Secondary containment will be made of impervious, chemically resistant material. • Any spillages from handling fuel and liquids will be immediately contained on site and the contaminated soil will be removed from the site for suitable treatment and disposal. • Secondary containment, drip trays or other overflow and drip containment measures shall be provided, for hazardous material containers at connection points or other possible overflow points and at construction sites holding more than 200 liters of hazardous liquid materials/waste..									
Protection of Topsoil and Soil Erosion	• Before the start of the excavation and construction activities soil stripping will be undertaken at the footprint of the construction areas to remove the surface soil or topsoil (vegetation, fertile soil layer) and subsoil. • Topsoil and subsoil will not be mixed during soil striping and necessary precautions will be taken for their separate storage. • Stockpiles will be protected from erosion and contamination impacts. Top and subsoil will be deposited separately, and long-term possible erosion and sedimentation will be prevented through the rehabilitation/planting.		X		Visual inspection Records of incident		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Contaminated soil (if generated any) will be disposed of in an appropriately licensed disposal site. • The use of cement and wet concrete in or close to any exposed areas will be carefully controlled. • Spoil and other surplus excavation material from the earthworks which is classed as "acceptable fill" shall, wherever practicable, be recovered and used in the construction works. Relevant authorities shall be consulted regarding this on a site-by-site basis to ensure the re-use of the material is acceptable. • Surplus construction material will be made available to third parties for reuse on local development projects if it cannot be utilized on site. • During construction activities, hazardous and non-hazardous materials and wastes will be handled by the site-specific Hazardous Material Management Plan. • Proper drainage systems shall be created which will remove the underground, surface, and wastewater from the site. • The length and steepness of slopes will be contoured and minimized to prevent soil erosion at the construction sites. • In case soil storage is extended on the site for more than 3 months, use much, grasses, or compacted soil to stabilize exposed areas will be implemented during construction on dry season.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
Protection of Surface Water	• Good construction site practices (i.e., measures as described below such as using designated areas for storing materials, regular inspections at construction sites, training of construction workers, placement of sediment traps and/or oil/water, etc.) will be adopted to minimize risks of water pollution. • Stockpiles of soil will be stored as needed in designated areas outside the work area and the quality of the excavation materials and backfill materials (i.e., from external sources) will be controlled. Measures will be taken to the soil and overburden stockpiles to prevent sediment transport and fugitive dust emissions. Slopes formed during construction (excavation, fill and stockpile slopes) and filler sections will be provided with proper drainage so as to prevent sediment transport and collect stormwater. • Surface runoff and site drainage will be managed in order to prevent direct discharge of surface water. • Contaminated surface runoff will be sent for treatment before discharge to the environment. • In-situ impermeable (i.e., polyethylene) septic tanks will be used to collect domestic wastewater from the camping sites and necessary agreements will be made with the municipality for the collection and disposal of wastewater via vacuum trucks to prevent direct wastewater discharges to the environment. • There will not be any surface water abstraction for the project water demand. Water demand for construction		X		Visual inspection Water analysis results Records of methods of operation of approved discharge systems Records of incident Periodic record of wastewater withdrawn from the septic tank		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	activities and dust suppression will be supplied from the existing municipality line. • The oil and fuel systems of the machinery and equipment to be used in the construction works will be regularly checked and operated after taking measures to prevent any oil and fuel leakage.									
Protection of Groundwater	• Construction activities will be regularly inspected on site. • Construction workers and relevant staff will be trained in relation to the implementation of good construction site practices and in spill response and prevention measures. • No fueling of vehicles or equipment will take place within excavated areas. Fueling shall only be carried out in designated areas away from surface drainage ways discharging outside the site. • No hazardous materials will be stored in excavated areas and all handling of hazardous materials will take place under special supervision. • Storage areas will be designed and constructed to provide secondary protection for hazardous materials and waste stored on site. • Water needs for construction activities will be provided by the existing network or tanker truck.		X		Visual inspection Training records Records of incident		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• In order to prevent groundwater contamination in case of a spill, spill kits will be present in the areas where the liquid materials are stored, the drainage systems of the areas where these materials are stored will be designed so as to prevent the spills and leaks from reaching the storm water system.									
MATERIAL RESOURCES AND WASTE MANAGEMENT										
Supply of Material	• Materials will be sourced from locations as close as possible to the Project site so as to minimize the impact of transportation route and distance. Where feasible, local suppliers will be prioritized for the procurement of materials and services to increase local benefits. • Materials from quarries, borrow pits, crushing plants and asphalt plants will be sourced from suppliers operating with valid environmental and other permits and licenses and where the sites are managed in full compliance with all applicable environmental, health and safety and social standards and specifications. • Appropriate storage conditions of these materials/chemicals will be established in line with the relevant chemical and health and safety regulations and international guidelines. • Chemical materials without material safety certificates will not be kept and stored at the project site.		X		Visual inspection Records of material supply	X			Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
Excavated Material Management	• The topsoil stripped from the construction areas and the excavated material will be stored separately in the temporary Excavated Material Storage Areas determined by Adana Municipality /ASKİ • The topsoil will be preserved through mitigation measures during the temporary storage and shall be reused for landscaping and site reinstatement following completion of construction works. . • Where technically suitable, excavated material shall be reused on-site as backfilling material, in line with project design and construction needs. Temporary storage areas for excavated material shall be clearly demarcated and located away from water bodies, drainage channels, and sensitive receptors. • Measures such as covering, compaction, and controlled watering shall be implemented to prevent dust generation, erosion, and surface runoff from stockpiled materials. • The excess excavation material will be transported to licensed excavation waste disposal sites. • The excavation wastes will be managed in line with Regulation on Control of excavation, Construction and Demolishing Wastes. • Unauthorized dumping of excavated soil or construction waste in public areas, watercourses, or private lands shall be strictly prohibited.		X		Visual inspection Records of disposal amount and area Permits for licensed excavation waste disposal site	X			Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)* ASKİ *(supports PIU where necessary)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• The contractor shall maintain records of excavated material quantities, storage locations, transportation, and final disposal, and make these available for inspection by the supervising authority upon request.									
Waste Management	• A site-specific Waste Management Plan (WMP) for construction phase in line with the provisions of Turkish Legislation and WBG ESHG will be prepared by the Contractor. • Whenever possible, priority will be given to minimize the amount of waste and raw material use through recovery and re-use of raw materials and the waste will be managed in accordance with the waste management hierarchy. • All waste will be collected, segregated, labelled, and stored on site according to the requirements by relevant Turkish regulations which address waste minimization, segregation, labelling, storage, transportation, and recycling/disposal. • Hazardous or non-hazardous inscription, waste code, stored waste amount and storage date will be indicated/labelled on wastes temporarily stored by classifying according to their properties. The reaction of waste with each other will be prevented by the measures taken in the Temporary Storage Area • Liquid hazardous and non-hazardous wastes (such as waste oils, chemicals, fuels, or other liquid substances), if generated, shall be stored separately in sealed, leak-		X		Visual inspection of control measures Waste generation and disposal records. Training records Records of complaints		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	proof containers placed within secondary containment systems (e.g. bunded areas or drip trays) with sufficient capacity to contain potential spills or leaks. Liquid waste storage areas shall be located on impermeable surfaces, protected from rainfall, and regularly inspected. Such wastes shall be delivered to licensed waste management companies in accordance with applicable legislation. • Permission regarding storage of waste (e.g., hazardous, and other special waste), except municipal and packaging wastes, in the Temporary Waste Storage Area, will be obtained from the relevant authority. • Spills will be addressed immediately by the appropriate Waste Management Plan which will be prepared prior to the construction works, and initiate soil cleanup and soil removal and disposal of the contaminated soil if needed. • Wastes will be collected in closed containers suitable for the type of waste before the final disposal and stored in the Temporary Storage Area to be established on the site. • Waste recycling, transport and disposal will be carried out by means of licensed companies and/or related municipalities. • Waste to be temporarily stored on site will be delivered to licensed transport vehicles appropriate to the type of waste for disposal. On-site storage of waste prior to final disposal (including earth dug for foundations)									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	should be at least 300 m from rivers, streams, lakes, and wetlands will be made. • Secured area for refueling and transfer of other toxic fluids distant from settlement area (and at least 50 m from drainage structures and 100 m from important water bodies); ideally on a hard/non-porous surface will be used. • Maintenance of machinery and equipment will not be carried out at the work site. Small amounts of maintenance materials such as oily rags, oil filters, used oil, etc. will be collected in sealed contaminated waste bins and at the end of the work, they will be collected in the hazardous waste section of the temporary waste storage area and disposed of properly. Used oil will never be poured on the ground and waterways as it may contaminate the soil and groundwater (including drinking water aquifers). • Record keeping will be done for all waste generation, storage onsite and offsite waste transportation activities to third party waste management facilities. • Periodic inspections will be conducted in the waste recycling/disposal facilities to ensure proper disposal practices are implemented. • Although asbestos or asbestos-containing materials (ACMs) are not expected to be present at the construction site, the contractor will prepare an asbestos management plan if they are encountered. In the event of an unexpected encounter with									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	Asbestos-Containing Material (ACM) the Asbestos Management Plan will be implemented. Asbestos or ACM at the construction site will be clearly marked as hazardous waste. • The asbestos will be appropriately contained and sealed to minimize exposure. • Prior to removal, ACM will be treated with a wetting agent to minimize asbestos dust. • If ACM is to be stored temporarily, it should be securely placed inside closed containers and clearly labeled. • Removing ACM must not be reused but disposed of at registered waste disposal sites.									
Water Requirement and Wastewater Generation	• The Water Resources Management Plan will be prepared prior to the construction work and implemented. • Regulation on Water for Human Consumption (O.G. date/no: February 17, 2005 / 25730) will be complied with in relation to drinking water of personnel. • Activities should not affect the availability of water for drinking and hygienic purposes. • No soiled materials, solid waste, toxic, or hazardous materials will be stored in, poured into, or thrown into water bodies for dilution or disposal.		X		Visual inspection of control measures Septic tank effluent disposal records (if any) Effluent quality measurement records (if any) Records of complaints		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• The domestic wastewater to be generated during the construction phase of the Project will be collected in impermeable underground septic tanks and necessary agreements will be made with the municipality to collect and dispose the wastewater via vacuum trucks regularly or to discharge the existing sewerage system that ends with the WWTP. • The flow of natural waters will not be obstructed or diverted to another direction, which may lead to drying up of riverbeds or flooding of settlements. • Separate concrete works in waterways and keep concrete mixing separate from drainage leading to waterways.									
Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH)	• If it is possible and feasible, local employment options will be selected at all phases of the Project. • Code of Conduct training will be provided to all project employees upon recruitment to minimize the impact of cultural differences. • Project staff will be trained in GBV, SEA/SH and CoC and the employment contract of those involved in sexual exploitation will be terminated. • It will be mandatory for project employees to sign the CoC. • SEA/SH Prevention and Response Action Plan will be developed.		X		Number of training courses related to SEA/SH and CoC Number of workers that have signed CoC. Successful integration of channels in GM/WGM to receive SEA/SH grievances Number of SEA/SH grievances		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(implementation at PIU level and monitoring of compliance by*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Enable multiple channels in the Project grievance mechanism (GM) and workers' grievance mechanism (WGM) through which complaints can be registered in a safe and confidential manner to enable women (or victim) to safely access the GM/WGM. • Women's sexual exploitation complaints will be handled confidentially and female employees (e.g., Female Social Experts) will be employed within the grievance mechanism to ensure the sharing of these complaints. • The content of E&S trainings to be provided to project employees will include Sexual Exploitation and Sexual Harassment, and the dissemination of the SEA/SH-specific Grievance Mechanism (GM) will be integrated as part of stakeholder engagement activities.				Successful implementation of SEA/SH Prevention and Response Action Plan				*contractor and reporting)*	
AIR QUALITY MANAGEMENT										
Dust Emissions During Construction	• The Air Quality Management Plan by the Contractor will be prepared to include mitigation measures that will be taken to reduce dust emissions during construction. • Minimal particulate emission from the construction activities will be maintained by good management and housekeeping practices and use of dust suppression methods.		X		Visual inspection of air quality control measures Records of maintenance Records of complaints Excavation waste storage area permits	X			Contractor *(implementation)* Supervision Consultant *(supervision)* PIU	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Water spraying will be performed at dust generating areas inside the Project site, especially during dry weather conditions. • Excavated soil will be stockpiled in areas designated by Adana Municipality and placed as far away from settlements as possible. • Excavated soil will be stockpiled (as necessary) in designated areas and will be placed as far as possible from the settlements. Dusty and loose materials will be properly covered, or top layers will be kept moist. • Screens will be placed as necessary at the construction site to reduce dust emissions. • Burning of the site clearance debris (trees, undergrowth) or construction waste materials will be avoided. • A stockpile of aggregate materials will be covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals. The following mitigation measures will be implemented to minimize dust emissions due to transport of materials during construction: • Speed limits specified in the Traffic Management Plan will be respected and vehicle drivers will be trained in dust control (e.g., unpaved roads around 10km/h, paved roads around 20 km/h within the site). • Truck operators will be trained to comply with speed limits and good construction site practices.								*(monitoring of compliance and reporting)*	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Transfer roads will be sprayed with water as necessary (for example using mobile bowsers) to prevent significant dust emissions, especially in dry weather conditions. • Open top trucks carrying excavated soil will be covered before leaving the construction area. • Frequently used and long-term haulage roads will be paved (e.g., asphalt, concrete, etc.). • Daily visual inspections will be done at the stockpiles, haulage roads and during the heavy vehicle movements in order to detect dust emission sources. • Depending on the complaints received, PM10 measurements will be made by the Contractor when necessary and mitigation measures will be implemented according to the results. • Consultation meetings will be held with local people and mukhtars and additional watering measures will be taken in areas with heavy dust problems. • Additional measures will be taken to prevent dust formation in areas where there are regionally intense complaints received through the complaint mechanism, or the number of working teams will be reduced, and the teams will be distributed homogeneously in the work area.									
	• The construction equipment and trucks will be maintained regularly to keep them in good working		X				X			

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
Exhaust Emissions During Construction	condition to minimize exhaust emissions caused by poor performance. • Engines of the equipment/trucks will be prevented from idling and running unnecessarily. • Unnecessary Project traffic will be avoided inside and outside of the Project side by adequate planning of material transport. • A Construction Traffic Management Plan will be prepared and implemented which will decrease the impact of the construction traffic. • Periodic inspections of exhaust emissions of work equipment will be carried out regularly and vehicles and equipment with negative reports will not be used in the project. • Laborers will be trained in air quality impacts and related measures. • Transportation trucks, especially those carrying materials that will cause dust and emissions, will be covered with tarpaulins when entering and leaving the construction site and on public roads. • Speed limits will be applied to all vehicles used within the scope of the Project, especially trucks.				Visual inspection of air quality control measures Records of maintenance Records of complaints				Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(compliance and reporting)*	Included in Works Contract
NOISE MANAGEMENT										
Noise	• High noise generating activities and heavy machinery will be executed during the daytime.		X		Visual inspection of noise control measures	X			Contractor *(implementation)*	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	A Noise Management Plan will be developed to cover the following measures: • The machinery and equipment to be used during the land preparation and construction activities will not be operated at the same point/location but homogeneously distributed on the site. • 'Low noise' equipment will be used during construction phase as far as possible. • Machines will be shut down or throttled down to a minimum when not in operation. • Maintenance procedures will be implemented to keep equipment in good working condition and to minimize extraneous noise caused by poor performance. • Nightwork will not be permitted within the scope of the subproject. • Noisy activities taking place within construction sites will be located away from the residential areas as far as possible. • Noise related to construction traffic will be properly managed through implementation of a Traffic Management Plan • Minimize subproject transportation through community areas. Maintain a buffer zone (such as open spaces, row of trees or vegetated areas) between the subproject site and residential areas to lessen the impact of noise to the living quarters. • On-site structures such as containers and offices will be used to screen sensitive receptors from noise sources as				Records of complaints Noise measurement results (if any)				Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	far as possible. Where necessary movable noise barriers (2-2.5 m high) will be used to ensure receptor noise levels are less than the limit values adjacent to noisy activities • Nearby communities will be contacted prior to noisy activities to inform them about the timing and duration. • Awareness will be increased among construction workers regarding noise mitigation. • Noise measurements will be made in areas where complaints received through the complaint mechanism are intense and the noise level will be reduced to legal values with necessary mitigation measures, including noise diverting screens etc. Use when needed and feasible noise-control methods such as fences, barriers, or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees). In case of excessive noise, alternative work plan arrangements will be made to bring the noise within legally prescribed limits. • An appropriate public relations program should be developed and the public in close settlements should be informed by the social expert. • An efficient grievance mechanism will be established to collect complaints from the local residents regarding the noise and vibration in order to prevent any discontent by the local communities.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
TRAFFIC MANAGEMENT										
Project Traffic	A Project specific Traffic Management and Safety Plan will be prepared and implemented. • Mitigation measures as part of the Traffic Management and Safety Plan will be developed in consultation with affected communities, vulnerable people or groups in communities and stakeholders. The appropriate consultation measures will be provided in the Plan. • Necessary consultation with the relevant authorities will be conducted related to the implementation of the Plan. • An efficient grievance mechanism will be implemented to collect complaints from local residents and other stakeholders on the potential traffic issues. • Before starting the planned Subproject works, road closure permits will be obtained from the relevant institutions, and alternative routes will be determined to prevent the local people from suffering. • A Traffic Management Plan will be implemented to minimize the impact of vehicle and pedestrian traffic on public facilities such as schools and health centers. Excavation areas will be surrounded with safety barriers to ensure pedestrian traffic and prevent accidents. • In particular, platforms with railings will be used to manage pedestrian traffic within the project area and to		X		Traffic accident records Records of complaints		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	prevent access to workplaces and residential areas. Additionally, trained flagmen acting as traffic marshals will be positioned on both sides of the road to guide vehicles and pedestrians safely, ensuring proper control of traffic flow in accordance with local OHS legislation and ILF/WB requirements. Furthermore, measures will be implemented to coordinate the movements of multiple vehicles, construction machinery, and equipment belonging to different contractors operating in the same area, in order to prevent interference, congestion, and potential hazards, thereby ensuring safe and efficient site operations. • Measures will be taken to ensure that the traffic density that will be created by the Project will not hinder the commercial activities of the workplaces. • Appropriate and direct traffic signs and markings will be placed in the working areas as well as physical direction of traffic.									
BIOLOGICAL ENVIRONMENT MANAGEMENT										
Impact on Flora and Fauna	• Construction sites and access roads will be separated from other areas with appropriate signboards, signs, and fences to limit the staff and vehicle access to the other areas.		X		Tree plantation records Visual inspection of control measures		X		Contractor *(implementation)* Supervision Consultant *(supervision)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Construction activities will not leave the designated work area and soil, vegetation and trees outside the work area will not be damaged. • Construction machinery, equipment and vehicles will not be parked outside the work area and drivers and operators will be trained. • Measures will be taken to prevent pollution of water resources around the project area and employees will be trained. Disposal and/or dumping of wastes into water environments will be prohibited. • Biodiversity awareness will be created in the training content given to the project staff and information will be provided on necessary mitigation measures. • destruction of habitats will be prevented and trees or vegetation outside the project area will not be interfered with. • Employees, contractors, and site visitors will be informed about the breeding periods of birds, and construction activities will be slowed down during the breeding periods of the animals' creatures when deemed necessary. • Groundwater discharge and water contamination will be prevented, especially during breeding and spawning periods, and all necessary measures will be taken. • Dust emissions will be minimized by lightly watering the immediate vicinity of the construction sites and wetting the stored material.								PIU *(monitoring of compliance and reporting)*	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Construction waste resulting from construction activities will not be stored in the work area but will be stored in predetermined storage areas and then disposed of. • All unnecessary lighting will be turned off at night to avoid attracting migratory birds. • Any trees located along the project route must be relocated using the appropriate method and in accordance with the relevant institutions' recommendations.									
LABOUR AND WORKING CONDITIONS										
Labour and Working Conditions	Develop and implement Labour Management Plan, including: • Personnel Selection and Employment Procedure. • Workers' Grievance Mechanism will be developed and will: ○ be open to all the Project workers (including contractors' workers). ○ be easily accessible by workers. ○ be free of retribution. ○ allow anonymous complaints to be raised and addressed. ○ Employees will be informed about this mechanism at the time of hiring and through regular training. ○ Handle grievances of an SEA/SH nature		X		Employee records Training records Records of worker's complaints		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(implementation at PIU level and monitoring of compliance by contractor and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Accommodation Camp Management Plan (ACMP) will be developed as relevant. • The Contractor shall establish and implement a Labor Management Procedure including a Code of Conduct. • After recruitment, workers will be made to sign contracts containing the employment contract and conditions and rights in accordance with national legislation and a copy will be given to the employees. • Data files will be maintained, including Employee Contracts, training records, signed Codes of Conduct, information on close relatives and medical surveillance reports. • The salary amount specified in the contract will be paid to employees on time and in full. • People without an employment contract will not be employed by the contractor or subcontractor. • Recruited employees will enter the work area after receiving all training within the scope of OHS and this ESMP. Employees whose training is not completed will not be allowed to enter the work site. • Local employment will be prioritized.									
Occupational health and safety	• Development and implementation of the Occupational Health and Safety Management Plan in line with applicable national health and safety legislation and international standards • Dust emissions and noise generation will be minimized to the extent possible with implementation of the mitigation measures.		X		• Visual inspection • Employee records • Visual inspection • Employee records • Equipment records	X			Contractor *(implementation)* Supervision Consultant *(supervision)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Fences/hard barriers and clearly visible warning and directional signs will be installed to ensure worker and public safety. Access to hazardous areas will be limited to authorized personnel. All work areas will be barricaded, and slip, trip, and fall hazards, particularly around excavations, will be cleared and maintained. Workers (including subcontractors) will be given a job specific OHS toolbox talk before the start of work each day and the necessary task specific personal protective equipment will be provided. • Employees who are not provided with and/or do not use personal protective equipment will not be allowed to enter the work site. • All employees (including subcontractors) will be given legally mandatory induction training before they go to the work site when they are first recruited and employees who have not received training will not start working. • All workers (including subcontractors) will be trained in health and safety, and Emergency Preparedness and Response Plan to respond timely to the incidents. • Response teams will be formed within the framework of the emergency preparedness and response plan. • All accidents and incidents will be recorded in line with Environmental and Social Incident Response Toolkit (ESIRT) and the National laws and regulations (Occupational Health and Safety (No 6331) etc.) • The efficiency of health and safety practices will be monitored through internal and external audits and corrective actions will be taken if required. • The Site Supervisor, the Employer (Municipality) and ILBANK will be informed within 24 hrs. of any incident				• Visual inspection of control measures • OHS records • Incident statistics and records				PIU *(monitoring of compliance and reporting)*	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	involving loss of life or loss of limb, or serious incident requiring 3 or more days of hospital care. • It will be ensured that subcontractors and primary suppliers in the supply network work in accordance with the subproject OHS plans and procedures and that mitigation measures are implemented. In addition, all high-risk activities including excavation works, lifting operations, electrical works, and other critical tasks will be carried out only by trained, competent, and authorized personnel, in accordance with national OHS legislation and ILF/WB requirements. • Task specific PPE (hard hat, work shoes, safety glasses, gloves, etc.) will be provided to all workers involved in the subproject. • A formal PTW procedure will be applied for all high-risk activities including but not limited to hot works, confined space entry, excavation works, lifting operations, and electrical works to ensure that such tasks are adequately authorized, controlled, and monitored. The PTW system will detail permit scope, approval hierarchy, hazard identification, required control measures, and permit closure protocols. • The Contractor will establish site-level coordination mechanisms to regulate and sequence the movement of vehicles, construction machinery, and equipment especially where multiple contractors operate simultaneously. This will minimize congestion, prevent operational interference, reduce collision risks, and ensure safe traffic flow throughout the work zones. • Work at height activities will be carried out only with proper fall protection systems, including guardrails, scaffolding with toe boards, fall arrest systems, safety nets, and certified anchor points. Workers will receive task-specific training, and									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	equipment will be inspected before use. Compliance with TS/EN standards and ILF/WB guidelines will be mandatory. • Emergency drills including fire response, evacuation, medical rescue, confined space incidents, and equipment failures will be conducted at planned intervals to ensure the readiness of all personnel. Drill results will be documented, evaluated, and used to improve the Emergency Preparedness and Response Plan. • Periodic health surveillance programs will be implemented for workers exposed to noise, vibration, dust, chemicals, manual handling risks, or extreme weather. Medical examinations will be performed in accordance with national OHS legislation, and records will be maintained to track exposure-related health risks. • All tools, lifting equipment, electrical systems, and machinery will undergo periodic inspections, preventive maintenance, and functional testing. Defective or unsafe equipment will be tagged, removed from service, and replaced or repaired before further use. • A transparent reporting mechanism will be established to allow workers to report hazards, unsafe conditions, and near-miss events without fear of reprisal. All reports will be logged, investigated, and addressed promptly, contributing to continuous improvement of site safety performance. • Employment of workers without valid MYK (Vocational Qualification Authority) certification is not permitted. All personnel must hold the required certifications for their specific tasks, and verification records should be maintained by the Contractor to ensure compliance with national labor laws and ILF/WB OHS requirements • Certified shoring, bracing, or appropriate benching/sloping systems will be used for all excavations, and daily inspections									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	will be conducted by the site safety supervisor and OHS employee. (pls ensure a proper checklist will be used) • All heavy machinery (excavators, etc) must be equipped with a functioning audible reverse alarm, a visible amber warning beacon/light during movement and maneuvering, and properly maintained lighting and signaling systems, if possible camera system. Daily inspection records and checklists confirming the operability of these features must be completed and kept on-site to ensure compliance with national OHS legislation and ILF/WB safety requirements.									
COMMUNITY HEALTH, SAFETY AND SECURITY										
Community Health, Safety and Security	• The Community Health, Safety and Security Plan will be developed and implemented for the Project construction stage. • Accommodation Camp Management Plan will be developed to ensure that accommodation services of adequate quality are provided to the Project workers (including provision of leisure facilities, shops, etc.) to minimize contacts with local residents and avoid labor influx as relevant. • Information disclosure and consultation activities with communities and other stakeholders will be performed in line with the Stakeholder Engagement Plan (SEP). • Transportation and material transportation in areas with heavy traffic will be carried out during the hours when traffic density is reduced. Pedestrian crossing		X		Visual inspection of control measures Traffic accident records Records of grievances		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	equipment will be used in construction areas where possible for safe pedestrian access. • All relevant measures will be taken to ensure that sacred structures, tombs, and places of worship in Adana will not be damaged during the project. • Work plans will be made in a way that will not prevent the commercial activities of the workplaces and commercial establishments in the project area. In particular, road closures that will prevent commercial activities will be made after alternative routes are identified and information is provided. • Construction activities will be carried out so as not to disrupt the daily functioning of sensitive areas such as schools, hospitals, and mosques. • An Emergency Preparedness and Response Plan will be prepared and implemented. • The Traffic Management Plan will be developed and implemented. • A grievance mechanism will be established to enable the community to raise concerns throughout the life of the Project and visibility of the grievance mechanism will be ensured. • The local culture and values of Adana will be taken into account in all phases of the Project and employees will be trained in codes of conduct. • Any behavior that may cause culture clashes will be avoided, and employees will be trained on this issue.									

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Work required in the sub-project near buildings, sacred trees, or objects of sentimental value to local communities (e.g., memorials, tombs, or stones) will only be carried out within the development route. Team members will be trained and briefed before work commences to avoid damaging objects of sentimental value to local communities. • All construction sites in the urban areas will be fenced with solid fences or barriers to prevent incidental access of community members into ongoing construction works.									
	• Information sharing and consultation with communities and other stakeholders will be carried out in line with the Stakeholder Engagement Plan (SEP). • A grievance mechanism will be established to enable the community to raise concerns throughout the life of the Project and visibility of the grievance mechanism will be ensured. • The local culture and values of Adana will be taken into account in all phases of the Project and employees will be trained in codes of conduct. • Any behavior that may cause culture clashes will be avoided, and employees will be trained on this issue.		X		Records of grievances		X		PIU *(implementation)*	-

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
Dust and Noise Impacts on the Nearby Community	• The Air Quality Management Plan will be prepared and implemented during the construction phase of the Project. • Transfer roads will be sprayed with water as necessary (for example using mobile watering bowsers) to prevent significant dust emissions, especially in dry weather conditions. • A Noise Management Plan will be prepared and implemented during the construction phase of the Project. • A Community Health and Safety and Security Plan, with commitments to implement the following key measures to protect the community from adverse effects during construction: noise, dust, other emissions risks with material and hazardous substances and accidents. • Construction activities will be planned in a way considering the nearby communities and necessary consent will be obtained from the relevant authority for undertaking construction activities during evening and nighttime, if needed • The Traffic Management Plan (TMP) will be prepared and implemented during the construction phase of the Project.		X		Records of grievances		X		Contractor *(implementation)* Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract
Life and Fire Safety			X				X		Contractor *(implementation)*	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• An Emergency Preparedness and Response Plan will be prepared and implemented. • Necessary measures will be taken for work offices and worker accommodation areas. Emergency assembly areas and signage, escape routes and signs and emergency warning systems will be installed. • Adequate and easily accessible fire extinguishers and equipment will be available on worker accommodation campsites and first aid kits will be present at each work/construction site. In addition, smoke detectors will be installed in all accommodation units and enclosed areas to ensure early detection of fire hazards and enhance overall emergency preparedness. • In accordance with national OHS legislation and ILF/World Bank requirements, the contractor shall ensure the presence of a sufficient number of certified first aiders on site. At least one certified first aider shall be present for each critical activity at all times, and the availability and certification status of designated first-aid personnel must be documented and kept up to date. • Safety drills, including emergency evacuation, first aid, and fire response exercises, shall be conducted in accordance with the requirements of the national OHS legislation.								Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	Included in Works Contract
Security	• Security will be provided in a manner that does not jeopardize the community's safety or Project Company's relationship with the community and that is		X				X		Contractor *(implementation)*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	consistent with national requirements and international standards. The grievance mechanism will allow communities and workers to express concerns regarding security issues and the behavior of security personnel. • Special security units will be established to prevent unauthorized entry and the exit of employees to the accommodation camp area.								Supervision Consultant *(supervision)* PIU *(monitoring of compliance and reporting)*	
LAND ACQUISTION AND INVOLUNTARY RESETTLEMENT										
Land Related Impacts Including Physical / Economic Displacement	• Damage to vegetation, agricultural lands and structures, pastures, livestock facilities will be avoided. In case of any damage, compensation at replacement cost or other acceptable costs (in line with ESS5 and Entitlement Matrix in RF) will be applied immediately. • It will be ensured that construction activities do not restrict/obstruct the social and economic life of the local community.	X			Records of Consultation Form Records of complaints Surveys Reports Surveys Reports				*Contractor (implementation)* *Supervision Consultant (supervision)* *PIU*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• It will ensure that workers and heavy equipment do not leave the work area designated for the Subproject. • Consultations with local communities should be carried out. • A grievance mechanism will be established for stakeholders affected by subproject activities. • Private land and public land outside the Project study area will not be entered and all measures will be taken to prevent this. • Availability of grievance mechanisms to stakeholders affected by land acquisition activities will be ensured. • No unnecessary space within the service road shall be occupied, and the working corridor shall be minimized. The service road alignment will be planned exclusively within public land and existing road corridors to avoid interference with private property. • Construction activities will be restricted to areas that do not encroach upon private land. • If private land is encountered during implementation, the Entitlement Matrix under ESS5 and the RF will be applied immediately. • The working corridor for the service road will be minimized to avoid land acquisition. • Continuous communication and information sharing with stakeholders will be ensured during field inspections and implementation.								*(operation of effective grievance mechanism; monitoring of compliance and reporting)* ASKİ *(supports grievance mechanism operated by PIU)*	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• It will ensure that workers and heavy equipment do not enter private property. The work will not be carried out on privately owned parcels unless they are expropriated, or their easement rights are established or rented which are all subject to ILBANK's approval.					X			Contractor *(implementation)* Supervision Consultant *(supervision)*	
CULTURAL HERITAGE										
Damage to Archeological Sites During construction works previously unknown cultural heritage might be encountered	• If archaeological findings are encountered during excavation works, the works will be stopped, and the relevant institutions will be contacted in accordance with the Chance Finding Procedure in the ESMF and Annex-3. The contractor will immediately (within 24 hrs.) inform the Employer and ILBANK of such a fine. • Training on the Chance Finds Procedure will be delivered to the project workers, including contractor and subcontractor employees, on the procedures to follow in case chance finds are discovered. • Based on the assessments conducted along the service road alignment, there are no known or registered cultural heritage assets within it		X		Chance finds records. Number of trainings on chance finds procedures		X		Contractor *(implementation)* *Supervision Consultant (supervision)* PIU *(monitoring of compliance and reporting)* ASKI *(supports PIU for*	Included in Works Contract

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• Construction activities for the service road will be planned and executed to avoid any potential impact on cultural or historical heritage in the surrounding area. • If any unexpected cultural heritage or archaeological remains are encountered during construction, the Chance Finds Procedure outlined in the ESMF and Annex 3 will be implemented immediately, and all work in the affected area will cease. • Within 24 hours of any chance find, the contractor will notify the Employer and ILBANK and inform the relevant authority without delay. • All project personnel, including contractor and subcontractor employees, will receive training on the Chance Finds Procedure prior to the initiation of excavation or ground-disturbing activities.								*correspondences regarding chance finds)*	
Grievance Mechanism	• As indicated in the Roles and Responsibilities table, ILBANK will establish a Grievance Mechanism for the project and ensure its effective operation throughout the life cycle of the project. • SEP to be updated annually and if there are significant changes in the Project. • The visibility of the SEP and Grievance Mechanism will be ensured, including contact details of staff responsible for grievance handling.		X		Records of grievance Stakeholder engagement records		X		PIU *(implementation of SEP, operation of grievance mechanism, and reporting)* ASKİ	

Potential Risks and Impacts	Proposed Mitigation Measures	Phase			Indicators for monitoring	Frequency of Monitoring			Responsibility for implementation and monitoring	Estimated Cost[1]
		Planning	Construction	Operation		Continuous	Monthly	Quarterly		
	• The Social Expert Community Liaison Officer will be appointed to monitor the grievances of the surrounding communities regarding construction activities and maintain relations with the affected communities. • Posters and brochures will be prepared and distributed to all people of Adana to increase the accessibility of the Grievance Mechanism and project visibility. • All records received through the grievance mechanism and other channels will be recorded in a grievance log for the duration of the project by ILBANK PIU.								*(supports PIU where necessary)* Contractor *(implementation of SEP, implementation of actions to address grievances)* Supervision Consultant *(implementation of SEP, supervision)*	

During the construction phase of the sub-project, the rights of the local people living in the project area will be preserved and the participation of all stakeholders in the project implementation will be ensured by building awareness. Works will be carried out by taking measures to prevent the commercial activities of the workplaces and shopkeepers in the project area without disrupting the daily life cycle. Code of Conduct training will be provided by the Contractor's experts, especially for the employees employed on the project and coming from different provinces to act in accordance with the culture of the local people.

In order to reduce the impacts of the sub-project on transportation and daily life in the project area, work will be started after taking all kinds of measures, determining alternative transportation routes, and taking occupational safety measures.

6. CAPACITY DEVELOPMENT AND TRAINING

Successful implementation of the project will depend among others on the effective implementation of the environmental and social risk management measures. Training and capacity building will be necessary for the key stakeholders in order to ensure effective implementation of the ESMP, SEP, RF, LMP, Waste Management Plan, Air Quality Management Plan, Noise Management Plan, Hazardous Materials Management Plan, Spill Prevention and Response Plan, Water Resources Management Plan, Soil Pollution Management Plan, Traffic and Road Safety Management Plan, Community Health, Safety and Security Plan, Accommodation Management Plan, Permit-to-Work (PTW) Procedure, Asbestos Management Plan, Sexual Exploitation and Abuse / Sexual Harassment (SEA/SH) Action Plan, Grievance Mechanism, Emergency Preparedness and Response Plan, and Incident Investigation Procedure . Trainings must include Code of Conduct.

An initial training approach is outlined on the table below. To the extent possible, training in environmental and social risk management will be integrated into the project cycle and operational procedures.

Table 6-1 Proposed Training and Capacity Building Approach

Responsible Party	Audience	Topics / Themes that may be covered
Supervision Consultant	Contractors/ASKİ	– Requirements of the WB ESF – Implementation of this ESMP, C-ESMP and its sub management plans. – Application of SEP and grievance/beneficiary feedback mechanism – Application of LMP, including Code of Conduct, incident reporting, SEA/SH Action Plan – Application of relevant E&S risk management measures/instruments – OHS includes emergency preparedness and response. – Community health and safety, – Sexual equality and gender-based violence
Contractors	Project Workers	– OHS includes emergency prevention and preparedness and response arrangements to emergency situations, vehicular safety, safe use of tools, machinery, and equipment, working at heights. – Contractual environmental and social requirements – Contractor ESMP – Code of Conduct – Labour requirements for primary suppliers – Infectious disease and epidemic measures – Diverse and respectful workplaces, free of SEA/SH.
Supervision Consultants	Community members	– Basic OHS measures and personal protective equipment. – Community health and safety issues – Code of conduct – Grievance redress – SEA/SH issues, prevention.

7. MONITORING AND REPORTING

Monitoring plays a key role in ensuring the continuity and effectiveness of the implementation of the identified mitigation management strategies. The main objective of the Monitoring Plan is to assess the implementation of the measures and requirements envisaged in this ESMP. Information gathered through monitoring can be used to improve management plans at all stages of the Project. Although impact assessment endeavors to cover all relevant potential impacts to determine their significance and include appropriate responses for these impacts, unexpected impacts may arise that can be managed or mitigated before they become an issue using the information obtained through monitoring. Therefore, monitoring will ensure that management plans are successfully implemented, and that the environment is protected through good practice at all stages of the Project.

The Contractors will be responsible for implementing the mitigation measures included in the E&S risk management documents (ESMPs) under the control of the supervision consultant and under the supervision of ILBANK PIU, and submit monthly, quarterly, and semi-annual Environmental and Social Monitoring Reporting (ESMR) to ILBANK PIU through the supervision consultant on EHS performance in accordance with the criteria specified in the relevant tender documents and contracts.

The ESHS performance of the subproject will be monitored by the responsible contractor' E&S team on a daily basis and the team will report the site findings on a monthly basis to the supervision consultant for review. The supervision consultant will check and add their site inspection findings and submit the consolidated reports to ILBANK PIU. ILBANK PIU has the right to share these reports with the local PMC for review.

The E&S Monitoring Reports to be prepared by the Contractors will use the report format prepared by ILBANK. These reports will be sent to the Consultant for submission to ILBANK within the first week of the month following the period covered by the Report. The annexes and supporting documents included in the report will also be submitted with the report.

8. IMPLEMENTATION SCHEDULE AND BUDGET FORCES

The expenditure items for the implementation of the ESMP are presented. The ESMP cost breakdown is given in Table 8-1.

Table 8-1 ESMP Budget Sources

Budget Item	Budget source
Recruitment of environmental, social and OHS experts (one expert for each discipline) for ILBANK PIU Monitoring of compliance and reporting by ILBANK PIU	Permanent experts will be financed under the budget of ILBANK, and consultant experts will be financed under budget of TERRP/Component 4.1
Assignment of social focal point for ASKI	Shall be financed under ASKI's own budget (*)
Recruitment of environmental, social and OHS experts (one expert for each discipline) for supervision consultancy	Included in Supervision Consultant's budget (**)
Recruitment of environmental, social and OHS experts (one expert for each discipline) for Contractor	Included in Contractor's budget (**)
Implementation of ESMP measures	Included in Contractor's budget (***)
Monitoring of ESMP Measurements and laboratory analyses were necessary by supervision consultant	Included in Supervision Consultant's budget

(*) Since ASKİ permanent staff will be appointed to these positions, there will be no extra cost to the Project budget.

(**) Recruitments of specialists shall be financed under the budget of supervision consultancy services. Relevant cost estimates are considered at the initial stage of the consultant selection. The contractors are obliged to hire environmental, social and OHS experts for the implementation and monitoring of ESMP within the scope and price of their bids. At this stage monthly cost estimated per specialist is 1,000 €/month)

(***) The laboratory and testing obligations and relevant reporting responsibility will be included within the works contract, during the construction period and the defect liability period. Later, for the operation stage, this responsibility will be transferred to ASKİ.

The Project is planned to be implemented till February 2029 including 12 months defects liability period (DLP) as shown in Table 8-2 below.

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Table 8-2 Time Schedule

YEAR	2025							2026												2027												2028													2029	
Item/Month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
ADANA STORMWATER PROJECT (ADANA-TERRP-W4)																																												
Design review and preparation of tender documents																																												
Preparation of environmental and social documents																																												
Preparation of bidding documents and bid evaluation																																												
Contract signing and construction																																												
Defects liability period (DLP)																																												

9. STAKEHOLDER ENGAGEMENT

Summary of the stakeholder engagement after the disclosure of the ESMP will be attached.

10. ANNEXES

10.1. Annex-1: DSİ Passage Permit

T.C.
ADANA BÜYÜKŞEHİR BELEDİYE BAŞKANLIĞI
Adana Su ve Kanalizasyon İdaresi Genel Müdürlüğü
Kanalizasyon Proje Şube Müdürlüğü

Sayı : E-39172788-220.99-255122
Konu : Geçiş İzni Hk.

DSİ 6. BÖLGE MÜDÜRLÜĞÜNE

Dünyada ve ülkemizde, küresel iklim değişikliği sebebiyle giderek artan, kısa süreli ancak şiddetli yağışların taşkınlara ve su baskınlarına sebep olması nedeniyle, özellikle yerleşim yerlerinde can ve mal kayıpları yaşanmaktadır. Küresel iklim değişikliğinin yanı sıra imara açılan alanlar ve buna bağlı asfalt veya beton alanlarının artarak, toprak ve yeşil alanların azalması yağışın hızlı bir şekilde akışa geçmesine sebep olmaktadır. Taşkın sebeplerinin biri de kapasitesi yetersiz menfez, büz, köprü vb. sanat yapılarından kaynaklandığı görülmektedir.

İlimiz Seyhan İlçesi Pınar, Fatih ve Gürselpaşa Mahallerinde sürekli hale gelen su baskınlarına çözüm olması için, (TS0 Sulama Kanalı) Kuzey Kıyıboyu Caddesinde bulunan mevcut 3x3 kutu menfez şeklindeki yağmursuyu hattına, ilave olarak aynı güzergahta 4x3 ve 5x3 boyutlarında kutu menfez yağmursuyu projesi hazırlanmıştır.

Bu proje ile mevcut 3x3 menfezin kapasitesinin üzerindeki yağışlarda, yağmur suyunun Kuzey Kıyıboyu Caddesi ve TS0 Sulama Kanalında yaşanan taşkınların önüne geçilmesi amaçlanmaktadır. Proje taşkın ve su baskınlarını önleyeceği gibi, sulama kanalına dökülebilecek herhangi bir kirliliğe mani olacak ve sulama kanalı stabilitesinin yağmur sularından korunmasına da yardımcı olacaktır.

Netice itibarı ile (TS0 Sulama Kanalı) Kuzey Kıyıboyu Caddesinde aşırı yağışlarda meydana gelen taşkınların ve su baskınlarının önüne geçilebilmesi için, Dünya Bankası "Türkiye Deprem Sonrası İyileştirme ve Yeniden İmar Projesi (TERRP)" kredisi kapsamında değerlendirilecek olan yağmursuyu projesine ait güzergahımız yazımız ekinde gönderilmiş olup, güzergah boyunca Kurumunuza ait parsellerden geçiş için gerekli izinlerin verilmesi hususunda;

Gereğini bilgilerinize arz ederim.

Mansur ALADAĞ
Genel Müdür V.

Ek : Güzergah

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: 1b114832-66c9-43dc-b708-3d01e5968249 Doğrulama Linki: https://www.turkiye.gov.tr/icisleri-belediye-ebys

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Kep Adresi: adanaaski@hs01.kep.tr

Bilgi için: İlker TORUN
Mühendis
Telefon No: -

1/1

10.2. Annex-2: Seyhan Municipality Response

T.C.
SEYHAN BELEDİYE BAŞKANLIĞI
Plan ve Proje Müdürlüğü

Sayı : E-92423000-115.01.06-357215
Konu : İmar Planı Hk.

ADANA SU VE KANALİZASYON İDARESİ GENEL MÜDÜRLÜĞÜ
KANALİZASYON PROJE ŞUBE MÜDÜRLÜĞÜNE

İlgi : 02.07.2025 tarihli ve E-39172788-220.99-251813 sayılı yazınız.

İlgi yazınızda, Genel Müdürlüğümüzce İlimiz Seyhan İlçesi Gürselpaşa Mahallesi Kuzey Kıyıboyu Caddesi için hazırlanan "Kıyıboyu Caddesi Yağmursuyu Projesi", Dünya Bankası'na ait "Türkiye Deprem Sonrası İyileştirme ve Yeniden İmar Projesi (TERRP)" kredisi kapsamında değerlendirildiğini; bu kapsamda hattın geçtiği güzergah onaylı imar planında yeşil alan olarak belirtilmekte olup, güzergah üzerinde bulunan Döşeme Mahallesi 908/2 parsel ile Zincirlibağlar Mahallesi 1181/6-8 parseller özel mülkiyet olarak gözüktüğünden dolayı yazınız ekinde sunulan güzergah boyunca bahse konu parseller için imar uygulaması yapılarak kamuya geçişinin sağlanmasını talep etmişsiniz.

Söz konusu Döşeme Mahallesi 908/2 parsel ile Zincirlibağlar Mahallesi 1181/6-8 parsellerin çevresinde daha önce 68 nolu Döşeme ve 53 nolu imar uygulamaları yapılmış olup, düzenleme sınırına dahil edilmemiştir. Yine söz konusu bölgede 1/1000 ölçekli uygulama imar planları çalışması devam etmekte olup, söz konusu talebiniz planlar onaylandıktan sonra değerlendirilecektir.

Bilgilerinize arz ederim.

İnci MAKAL
Belediye Başkan Yardımcısı

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Doğrulama Kodu: baf1a365-39eb-4b22-ab75-09fcbe263916 Doğrulama Linki: https://www.turkiye.gov.tr/icisleri-belediye-ebys

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Bilgi için: Güray EKER
Mühendis
Telefon No: -

10.3. Annex-3: Zoning Plan Amendment Letter

T.C.
ADANA BÜYÜKŞEHİR BELEDİYE BAŞKANLIĞI
Adana Su ve Kanalizasyon İdaresi Genel Müdürlüğü
Kanalizasyon Proje Şube Müdürlüğü

Sayı : E-39172788-220.99-244145
Konu : İmar Plan Tadilatı Hk.

ADANA BÜYÜKŞEHİR BELEDİYE BAŞKANLIĞINA

İklim değişikliği nedeniyle meydana gelen ve son yıllarda giderek artan ani ve şiddetli yağışlar sonucunda Dünyada ve Ülkemizde sel, taşkın vb. hidro-meteorolojik karakterli afetler meydana gelmekte, bu afetlerde can ve mal kayıplarına, tarım alanlarında büyük zararlara sebep olmaktadır. Taşkınların sebepleri incelendiğinde; en önemli sebeplerin gerçek, kamu ve tüzel kişilerce taşkın kontrol tesislerine ya da dere yataklarına yapılan müdahalelerin olduğu ve DSİ'den görüş alınmadan dere yatakları üzerine inşa edilen kapasitesi yetersiz yol/dere geçiş yapılarının (menfez, köprü, büz vs.) olduğu tespit edilmiştir.

Buna dayanarak, 3 Mayıs 2019 tarih ve 30763 Sayılı Resmi Gazetede yayımlanan **Taşkın ve Rüsubat Kontrol Yönetmeliği'nin 17. maddesi**nde;

"1- Akarsu yataklarında, taşkın kontrol tesislerinde, akarsular üzerindeki köprülerin altında veya akarsular üzerindeki menfezlerin içinde su akış kesitinin daralmasına sebebiyet veren ve su akışını engelleyerek taşkınlara sebep olabilecek yapılar yapılamaz. Su akış kesitinin daralmasına sebebiyet verdiği tespit edilen yapılar; 14/1/1943 tarihli ve 4373 sayılı Kanun kapsamında yer alıyor ise mezkür kanun hükümlerine göre, bunun dışındaki alanlarda kalıyor ise imar mevzuatına göre mülki amirin sorumluluğunda yetkili belediye veya il özel idaresince kaldırılır.

2-Derelerin üzeri zaruri hallere münhasır olmak üzere DSİ Genel Müdürlüğünün izni alındıktan sonra gerçekleştirilecek işlemler hariç kapatılamaz." hükümleri yer almaktadır.

Ayrıca, Yurdumuzun değişik yörelerinde meydana gelen ve can ve mal kayıplarına sebep olduğu kadar, günlük hayatı, her türlü ekonomik ve ticari faaliyeti olumsuz yönde etkileyen taşkınların önlenmesi ve yol açtığı kayıpların giderilmesi için 09.09.2006 Tarih ve 26284 Sayıh Resmi Gazete'de yayımlanan 2006/27 sayılı, **"Dere Yatakları ve Taşkınlar"** konulu Başbakanlık Genelgesinde geçen tedbirlerin alınması gerektiği belirtilmiştir.

Söz konusu Yönetmeliklerden de anlaşılacağı üzere taşkınlara sebebiyet verilmemesi ve herhangi bir can/mal kaybı yaşanmaması adına dere yataklarının korunup gereken hassasiyetin gösterilmesi önemlidir. İlimiz Çukurova İlçesi Kabasakal, Şambayadı, Esentepe ve Kireçocağı mahallelerinde bulunan dere yatakları ve su yüzeyi olarak korunması gereken alanlar işaretlenmiş ve yazımız ekinde sunulmuştur. "Su Yüzeyi" olarak tanımlanan dere yataklarının üzerine, taşkın riskinin önüne geçilmesi amacıyla herhangi bir yapılaşmaya izin verilmemesi ve topoğrafik açıdan kanalizasyon ve yağmursuyu hatlarının döşenmesine engel olmayacak şekilde imar tadilatı yapılması hususunda;

Gereğini bilgilerinize arz ederim.

Emrah KAPLAN
Genel Müdür a.
Genel Müdür Yardımcısı

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Mühendis
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1/2

10.4. Annex-4: Çukurova Municipality Response

T.C.
ÇUKUROVA BELEDİYE BAŞKANLIĞI
Plan ve Proje Müdürlüğü

Sayı : E-73420213-115.01.06-122186 25.12.2024
Konu : Dere Yatakları Hk.

ADANA SU VE KANALİZASYON İDARESİ GENEL MÜDÜRLÜĞÜ
Kanalizasyon Proje Şube Müdürlüğüne

İlgi : 20.11.2024 tarihli ve E-39172788-599-221598 sayılı yazınız.

İlgili Yazınızla, değişen iklim koşullarından kaynaklı aşırı yağışların gözlendiği ve kapatılan dere yatakları yüzünden ülkemizde ciddi can ve mal kayıplarının meydana geldiğinden bahsedilmiş olup, bu olumsuzlukların önüne geçmek için mevcut dere yataklarının imar planlarında açık dere olacak şekilde korunması gerektiğini dile getirmektesiniz.

Dere yatakları ile ilgili 1/5000 Ölçekli Nazım İmar Plan Adana Büyükşehir Belediye Meclisince onaylanmış olup henüz askı ve kesinleşme işlemleri gerçekleştirilemediği için alt ölçekli planları hazırlayamamaktayız. Üst ölçekli planlar kesinleşip geldikten sonra alt ölçekli plan tarafımızca yapılacaktır.

Bilgilerinize arz ederim.

Bahadır ÖZDEMİR
Başkan A.
Başkan Yardımcısı

Bu belge, güvenli elektronik imza ile imzalanmıştır.
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e-Posta: cukurovabelediyesi@hs01.kep.tr İnternet Adresi: http://www.cukurova.bel.tr
Kep Adresi: cukurovabelediyesi@hs01.kep.tr

Bilgi için: Yaren ÇETİN
Şehir Plancısı
Telefon No: -

1/1

10.5. Annex-5: DSI Letter

T.C.
TARIM VE ORMAN BAKANLIĞI
Devlet Su İşleri Genel Müdürlüğü
6. Bölge Müdürlüğü

Sayı : E-38292074-120-3011056

Konu : Adana ili, Çukurova ilçesi, Esentepe Mahallesi Çamalağı Deresi Islahı Proje Onayı Hk

DAĞITIM YERLERİNE

İlgi : 14.12.2022 tarihli ve 125160 sayılı yazınız.

İlgi yazınızda; Adana ili, Çukurova ilçesi, Esentepe Mahallesinde bulunan Çamalağı Dere ıslahına ait dere ıslah projesinin ekte sunulduğu belirtilerek, gerekli incelemelerin yapılması istenmektedir.

Konu incelenmiştir. İlgi yazınız ekinde sunulan projeler 03 Mayıs 2019 tarih ve 30763 sayılı Resmi Gazetede yayımlanarak yürürlüğe giren **Taşkın ve Rüsubat Kontrolü Yönetmeliğ**inde belirtilen kriterler doğrultusunda hidrolik açıdan incelenmiştir.

Yapılan İncelemelerde;

a) Çamalağı Deresinde 5 farklı kesit çalışıldığı,

b)Planlama çalışmalarının membaadan mansaba doğru yapıldığı,

c) Hidrolik tahkiklerde; Km: 0+000- 0+953,03 arasında 100 yıllık 14.20 m^3/s ile 500 yıllık 19.90 m^3/s ve Km:0+953,03 - 3+005,00 arasında 100 yıllık 23.80 m^3/s ile 500 yıllık 32.90 m^3/s taşkın tekerrür debi değerleri kullanıldığı, bu çerçevede;

-1.Kesitin, (Membaadan) Km:0+000 - 0+673,04 arasında, 2.50 x 2.00 m, U tipi beton kanal olarak projelendirildiği ancak **hidrolik kriterlerinin yetersiz olduğu,**

-2.Kesitin, Km:0+673,04 - 0+953,03 arasında, 2.50 x 2.50 m, U tipi beton kanal olarak projelendirildiği ve hidrolik kriterleri sağladığı,

-3.Kesitin, Km:0+953,03 - 1+ 993,34 arasında, 3.00 x 3.00 m, U tipi beton kanal olarak projelendirildiği ve hidrolik kriterleri sağladığı,

-4.Kesitin, Km:1+ 993,34 - 2+033,07 arasında, 3.50 x 3.00 m, U tipi beton kanal olarak projelendirildiği ve hidrolik kriterleri sağladığı,

-5.Kesitin, Km: 2+033,07- 3+005,00 arasında, 3.50 x 2.50 m, U tipi beton kanal olarak projelendirildiği ve hidrolik kriterleri sağladığı

tespit edilmiştir.

Yapılan incelemeler neticesinde;

a) Söz konusu 1 Nolu Kesitin (Km:0+000 - 0+673,04) **min. 2.50 x 2.20** m ölçülerinde olacak şekilde revize edilmesi.

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1 / 3

b) Projenin öncesi, yapımı ve sonrasında 03 Mayıs 2019 tarih ve 30763 sayılı Resmi Gazetede yayımlanarak yürürlüğe giren "Taşkın ve Rüsubat Kontrolü Yönetmeliği" ve 09.09.2006 tarih ve 26284 Sayılı Resmi Gazete yayımlanarak yürürlüğe giren 2006/27 sayılı "**Dere Yatakları ve Taşkınlar**" konulu Başbakanlık Genelgesinde belirtilen hususlara uyulması,

c) İdaremizden projenin yapımı konusunda herhangi bir hak talep edilmemesi,

ç) Projenin yapımı ve sonrasında projeden kaynaklanan üçüncü kişilerin görebileceği zarar ziyandan Kurumumuzun sorumlu tutulmaması,

d) Islah çalışmalarının tamamlanması sonrası gerektiğinde makinalı çalışmalara imkan sağlayacak şekilde taşkın kontrol tesisinin tek veya her iki sahilinde sürekliliği olan, asgari 6 (altı) metre genişliğinde işletme ve bakım yolunun düzenlenmesi,

e) Yapılacak inşaat çalışmalarında DSİ Teknik Şartnamelerine uygun olarak inşa edilmesi ve inşaat çalışmalarında malzeme ve işçilik kalitesi ile ilgili bütün sorumluluğun ilgilisinde olması, proje kapsamındaki yapıların hidrolik hesapları dışında kalan (Stabilite, betonarme... vb.) hesapları ile ilgili sorumluluğun ilgilisine ait olması, tüm masrafların ilgilisi tarafından karşılanması,

f) Projenin yapım ve sonrasındaki tüm güvenlik tedbirlerinin (uyarı levhası, bariyer, tel örgü vs.) tarafınızdan alınması ve tarafınızın sorumlu olması,

g) Yapılacak imalatların suyun akışını engellemeyecek şekilde yapılması,

ğ) İnşaat yapım faaliyetlerinin DSİ 61. Şube Müdürlüğüne yazı ile bildirilmesi ve DSİ 61. Şube Müdürlüğü bilgisi ve kontrolünde yapılması,

h) Dere yataklarında olması muhtemel olaylar (membadan heyelan kütlesi, iri kaya, ağaç sürüklenmesi, dere yataklarına izinsiz ve kesiti yetersiz müdahaleler yapılması, Q_{500} taşkın tekerrür debisinin üzerinde debi gelmesi vb.) meydana gelmesi durumunda taşkın tesisi olan yerlerde de taşkın yaşanma ihtimalinin olabileceğinin bilinmesi,

ı) Dere ıslah çalışmalarının tamamlanması akabinde her yıl düzenli olarak bakım, onarım ve temizlik çalışmalarının yapılması ve sorumluluğun tarafınızda olması,

Söz konusu proje, yukarıda bahsedilen hususlara uyulması şartıyla, hidrolik yönünden uygun bulunmuştur.

Gereğini arz/rica ederim.

Bekir PEHLİVAN
Bölge Müdürü a.
Bölge Müdür Yardımcısı

Ek:

1 - Plan (1 Sayfa)

2 - Profil (1 Sayfa)

3 - Dere güzergahı

Dağıtım:

Adana Büyükşehir Belediye Başkanlığına

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10.6. Annex-6 E&S Screening Form

TÜRKİYE EARTHQUAKE RECONSTRUCTION AND RECOVERY PROJECT

(TERRP)

ADANA STORMWATER PROJECT

ENVIRONMENTAL AND SOCIAL SCREENING FORM

(E&S SF)

1. Subproject Information:

Subproject Title	Adana Stormwater Project
Subproject Location	Adana Municipality
Regional Unit in Charge	Adana Regional Directorate of ILBANK Project Management Consultant Supervision Consultant
Estimated Cost	10.743.696,57 EUR
Start/Completion Date	02/2026-02/2028 DLP: 02/2028-02/2029
Brief Description of Sub-project	The Sub-Project has two components. 1. Construction of Kıyıboyu Street Stormwater Project - 1.728,67m (Box-section B=5,0 m, H=3,0 m) - 1.319,33m (Box-section B=4,0 m, H=3,0 m) - TOTAL= 3.048,00m 2. Construction of Esentepe - Çamalağı Stormwater Project - 529,55 m (U-section B=2,5 m, H=2,20 m) - 193,56 m (U-section B=2,5 m, H=2,5 m) - 705,75 m (U-section B=3,0 m, H=3,0m) - 21,06 m (U-section B=3,5 m, H=3,0 m) - 633,18 m (U-section B=3,5 m, H=2,5 m) - 7 Drop Structure (Total = 80,14 m) - 8 Culvert Structure (Total = 649,96 m) - TOTAL= 2813,20 m

2. Environmental and Social Screening Questionnaires

Questions	Answer		Next Steps
	Yes	No	
ESS1			
1. Is the subproject likely to have significant adverse E&S impacts that are sensitive and unprecedented that trigger the 'Ineligible Activities' and exclusion? (Please refer to Table 11 and Annex-7)		X	No. The subproject is not likely to have a significant adverse E&S impact that are defined in Table 11 and Annex-7 of the ESMF of the TERRP. The subproject focuses on the construction of Stormwater Drainage Systems in earthquake-affected areas, with an emphasis on enhancing stormwater systems and incorporating climate and disaster resilience measures in the design and will have E&S impacts that are predictable, can be managed/mitigated, predominantly reversible, short-term, and are mostly limited to the subproject area and its immediate surroundings.
2. Does the subproject involve new construction of ponds, wastewater sewerage systems, wastewater treatment systems, solid waste management systems, shelters, roads, community centers, schools, bridges and jetties?[2]		X	The Adana Stormwater Project, the subproject involves the construction of the following infrastructure components: The Sub-Project has two components; • Construction of Kıyıboyu Street Stormwater Project, • Construction of Esentepe - Çamalağı Stormwater Drainage Project. Within the scope of the " Adana Stormwater Project" focuses on the improvement of infrastructure of Seyhan and Çukurova District specifically focuses on the construction of Stormwater Drainage Systems of Esentepe and Gürselpaşa Neighborhoods aligns seamlessly with the overarching goal of the TERRP project to support the construction of infrastructure in earthquake-affected regions. No, the subproject does not involve new construction of ponds, wastewater sewerage systems, wastewater treatment systems, solid waste management systems, shelters, roads, community centers, schools, bridges, or jetties. The project focuses on the construction of a stormwater drainage system.
3. Does the subproject involve renovation or rehabilitation of any small-scale infrastructure, such as groundwater wells, latrines, showers/washing facilities, or shelters?		X	Based on the available information, the subproject primarily involves the construction of new infrastructure rather than the renovation or rehabilitation of stormwater drainage systems.
4. Will construction or renovation works require new borrow pits or quarries to be opened?		X	No. The licensed quarries still in service throughout the province are sufficient for the material required within the scope of the project.
ESS2			
5. Does the subproject involve uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor?		X	The subproject does not involve the use of any goods and equipment, which involve forced labor, child labor, or other harmful or exploitative forms of labor. The labor and

[2] Questions 2 and 3 are critical questions in the Screening Form, as they will determine whether a subproject can use pre-prepared ESCOPs included in Annex-1 or needs to prepare a site-specific ESMP. If all the subprojects are expected to be low risk, then all subprojects may be able to use the pre-prepared ESCOPs. However, if there are some subproject activities, such as construction of community bridges, which may propose moderate risk, these may require site-specific ESMPs to be prepared. Separate subproject activities that may be low risk and those that may be moderate or substantial risk.

Questions	Answer		Next Steps
	Yes	No	
			working conditions of the supply chain will be ensured to comply with ESS2 through bidding and contract documents for the procurement of goods and equipment.
6. Does the subproject involve the recruitment of a workforce including direct, contracted and/or primary supply workers?	X		The workforce includes the contracted and primary supply workers. In addition, local recruitment from the close settlements will be prioritized as much as possible. The project-level LMP prepared for the TERRP will be implemented.
7. Do workers need PPE relative to the potential risks and hazards associated with their work?	X		The contractor will provide PPEs (hard hat, work shoes, safety glasses, gloves, etc.) to all workers in line with the project-level LMP prepared for the TERRP as well as the OHSP prepared by the contractor in line with the national and international standards.
8. Is there a risk that women may be underpaid when compared to men when working on the project construction?		X	Any risk about the subject is not anticipated. The staff salaries are not determined by gender but by title and experience. Recruitment will be performed on a non-discriminatory basis.
9. Does the project lead to any risks and impacts on, individuals or groups who, because of their particular circumstances, may be disadvantaged or vulnerable.[3]		X	No, the sub-project does not lead to any risks or impacts for vulnerable/disadvantaged individuals or groups. On the contrary, the project aims to ensure the provision of adequate urban infrastructure services in compliance with national and international laws, with a specific focus on addressing the damage caused by earthquakes and thus addressing the groups or individuals who are disadvantaged or vulnerable regarding the provision of their stormwater drainage systems.
ESS3			
10. Is the project likely to generate solid or liquid waste that could adversely impact soils, vegetation, rivers, streams or groundwater?	X		The construction and implementation of the sub-project may generate solid or liquid waste during the development and operational phases of the project. However, all waste types to be generated will be collected and disposed of regularly. Solid waste will be collected and disposed of regularly to the closest licensed waste landfill. A Waste Management Plan will be developed by the Contractor to manage the subject waste adequately without any harm to soil, vegetation, surface water and groundwater. Wastewater will be collected in an impermeable septic tank and will be emptied regularly by ASKİ and will be carried to the nearest WWTP.
11. Are any of the construction works involve the removal of asbestos or other hazardous materials?		X	The project focuses on the construction of a stormwater drainage system and does not involve any rehabilitation work for the existing system. In the event of an unexpected encounter with Asbestos-Containing Material (ACM) the Asbestos Management Procedure will be prepared by the Contractor.
12. Are work likely to cause significant negative impacts to air and/or water quality?	X		The activities are anticipated to have a risk to air quality mostly due to dust and exhaust

[3] "Disadvantaged or vulnerable" refers to those individuals or groups who, by virtue of, for example, their age, gender, ethnicity, religion, physical, mental or other disability, social, civic or health status, sexual orientation, gender identity, economic disadvantages or ethnic peoples status, and/or dependence on unique natural resources, may be more likely to be adversely affected by the project impacts and/or more limited than others in their ability to take advantage of a project's benefits.

Questions	Answer		Next Steps
	Yes	No	
			emissions. However, those are predictable and temporary and can be easily mitigated by implementing control measures; therefore, the risk is evaluated as not significant. As stated in the ESMP and the E&S SF, there is an existing stormwater drainage system in the Gürselpaşa and Esentepe neighborhoods. This system is part of the Adana Stormwater Project." However, due to insufficient capacity, the current system frequently experiences blockages and overflows during periods of heavy rainfall. If there are delays in constructing the new stormwater drainage infrastructure, discharges will continue to be directed through the existing drainage network as is currently done until construction is completed. Depending on seasonal conditions, the risk of flooding will persist under such circumstances. Consequently, stagnant water accumulation may lead to increased mosquito and pest populations, posing a potential public health risk to the local community. Once construction of the new drainage system is complete, however, these issues are expected to be resolved, ensuring compliance with relevant environmental standards and contributing to improved climate resilience and public health outcomes.
13. Does the activity rely on existing infrastructure (such as discharge points) that is inadequate to prevent environmental impacts?	X		Given the emphasis on constructing new infrastructure to address the changing demographics and population influx in the area, it is likely that the project aims to enhance the capacity and efficiency of the existing infrastructure to prevent environmental impacts related to inadequate wastewater management. As stated in the ESMP and the E&S SF, there is an existing stormwater drainage system in the Gürselpaşa and Esentepe neighborhoods. This system is part of the "Adana Stormwater Project." However, due to insufficient capacity, the current system frequently experiences blockages and overflows during periods of heavy rainfall. The main objective of the project is to manage stormwater effectively and safely in Seyhan District, particularly in Gürselpaşa and Esentepe neighborhoods, where the existing drainage infrastructure is inadequate. During rainy periods, water accumulation increases the risk of flooding and creates moist, stagnant areas that support the proliferation of flies and pests, posing a threat to public health. The project aims to mitigate these risks and improve infrastructure resilience, which has become insufficient due to increased population pressure after the disaster, contributing to the creation of safe, healthy, and sustainable urban living conditions.
ESS4			
15. Is there a risk of increased community exposure to communicable disease (such as COVID-19, HIV/AIDS, Malaria), or increase in the risk of traffic related accidents?		X	The risk of increased community exposure to communicable diseases is expected to be low.
16. Is an influx of workers, from outside the community, expected? Would workers be expected to use health services of the community?	X		Even though priority will be given to the close settlements during the recruitment, it is expected that the workers will be hired from

Questions	Answer		Next Steps
	Yes	No	
Would they create pressures on existing community services (water, electricity, health, recreation, others?)			outside the community, especially for the jobs that need skilled/qualified personnel. Therefore, it is expected that some external labor will be hired for the sub-project area. Labor is expected to benefit from the existing community services; however, it is not envisaged that great pressure will be created on the existing community service system.
17. Is there a risk that SEA/SH may increase as a result of project works?	X		It is expected that some external labor will be hired for the sub-project site. Some mitigation measures will be implemented in the subproject; the sub-project will implement a Code of Conduct for all personnel working in the field and operate a grievance mechanism for project workers. Gender equality, SEA/SH and Code of Conduct trainings will be provided by the Consultant to all personnel in the field. All staff employed on the project will sign a written commitment to comply with the Code of Conduct. The project-level LMP prepared for the TERRP will be implemented. Besides, Gender Based Violence (GBV) expert will closely monitor and will be in touch with the local people throughout the sub-project life cycle. As part of the SEP, GM will be established to receive and facilitate the resolution of suggestions and complaints. Grievance Mechanism (GM) will enable submission of grievances and concerns in person, by phone, e-mail and/or website. Grievance boxes will be located in the village and these locations will be accessible by all locals including disadvantageous groups, such as women, children, and disabled people.
18. Would any public facilities, such as schools, health clinic, and mosque be negatively affected by construction?		X	No. There is no schools, mosques, etc. next to some of the warehouses to be built.
19. Would traffic and road safety be negatively affected by construction?			X
ESS5			
20. Does the subproject involve involuntary land acquisition?		X	Project aims to reconstruct critical infrastructure facilities such as water, stormwater, and sewerage networks in earthquake-affected regions, specifically in Esentepe and Gürselpaşa neighborhood, The project will not involve any land acquisition.
21. Does the subproject involve physical and/or economic displacement of people?		X	The sub-project does not involve any physical and/or economic displacement of people.
ESS6			
22. Does the subproject involve activities that have potential to cause any significant loss or degradation of critical natural habitats[4] whether directly or indirectly, or which would lead to adverse impacts on natural habitats?		X	The sub-project area does not overlap with any nationally or internationally protected areas having important ecosystem features.
23. Will the project involve the conversion or degradation of non-critical natural habitats?	X		One of the primary concerns is the potential loss of trees located along the proposed stormwater drainage line. As part of the excavation and construction activities, it will be necessary to remove certain trees that are situated directly within the project alignment. So, any trees located along the project route must be relocated using the

[4] Critical natural habitats such as legally protected, officially proposed for protection, identified by authoritative sources for their high conservation value, or recognized as protected by traditional local communities.

Questions	Answer		Next Steps
	Yes	No	
			appropriate method and in accordance with the relevant institutions' recommendations. This may lead to localized habitat loss and a minor reduction in urban biodiversity.
24. Will this activity require clearance of trees, including inland natural vegetation?	X		One of the primary concerns is the potential loss of trees located along the proposed stormwater drainage line. As part of the excavation and construction activities, it will be necessary to remove certain trees that are situated directly within the project alignment. So, Any trees located along the project route must be relocated using the appropriate method and in accordance with the relevant institutions (DSİ) ' recommendations. This may lead to localized habitat loss and a minor reduction in urban biodiversity.
25. Will there be any significant impact on any ecosystems of importance (especially those supporting rare, threatened or endangered species of flora and fauna)?		X	There will be no significant impact on any ecosystems of importance (especially those supporting rare, threatened or endangered species of flora and fauna)
ESS8			
26. Is the subproject to be located within or adjacent to a sensitive site (historical or archaeological or culturally significant site) or facility?		X	There are no historical, archaeological or culturally significant sites. If any cultural heritage is encountered, the chance find procedure outlined in the ESMP will be implemented.
27. Locate near buildings, sacred trees or objects having spiritual values to local communities (e.g., memorials, graves or stones) or require excavation near there?		X	No sacred trees or objects have spiritual value to local people near the new location selected for the construction.

3. Conclusion

In conclusion, the Adana Stormwater Project represents a targeted intervention aimed at significantly enhancing service provision in the region. By addressing the urgent needs of a growing population and ensuring compliance with health and environmental standards, the project not only promises to restore but also to elevate the standards of living for residents, positioning the community for sustainable growth and development in the future.

The Project has been screened in accordance with the latest Turkish EIA Regulation, published in the Official Gazette on 29 July 2022, and it has been determined that the Project does not fall under the scope of the EIA Regulation, as the construction works of sewerage, storm water and drinking water pipelines are not included in either Annex-I or Annex-II of the Regulation.

Additionally, Stormwater Drainage System Project activities are not included in the exclusion list of TERRP's ESMF. Therefore, the sub-project is evaluated as eligible for financing.

ESS1: Assessment of environmental and social risks and impacts

- Waste generation is foreseen, and the associated risk is temporary and site-specific. Other details are given under the relevant ESSs.

- The project has been designed to avoid environmentally and socially sensitive and unprecedented impacts. The environmental impacts will be minimized by the technologies used and the measures taken during the construction of the Adana Stormwater Drainage System Project.

The risk level can be classified as "low".

ESS2: Labor and Working Conditions

- The sub-project will not involve any risks of forced labor, child labor and other exploitative forms of labor.

- There will be an influx of workers, albeit in moderate numbers. The workforce includes the contracted and primary supply workers. In addition, local recruitment from the close settlements will be prioritized as much as possible.

- The contractors will provide PPEs (hard hat, work shoes, safety glasses, gloves, etc.) to all workers in line with the project-level LMP prepared for the TERRP. Occupational health and safety risks that exist during construction works should and will be managed considering the hierarchy of controls. All the necessary measures will be taken as in OHS Plan.

The risk level can be assessed as "low".

ESS3: Resource efficiency and pollution prevention

- As part of the project, a new stormwater drainage system will be constructed. Currently, there are no asbestos-containing materials along the project route. If unexpected asbestos-containing material (ACM) is encountered, the contractor will prepare an Asbestos Management Plan, and the Asbestos Management Procedure will be implemented in accordance with this plan.

    - This may involve testing samples of materials suspected to contain asbestos and following specific procedures for safe removal and disposal if ACMs are found.
    - Asbestos or ACM at the construction site will be clearly marked as hazardous waste.
    - The asbestos will be appropriately contained and sealed to minimize exposure.
    - Prior to removal, ACM will be treated with a wetting agent to minimize asbestos dust.
    - If ACM is to be stored temporarily, it should be securely placed inside closed containers and clearly labeled.
    - Removed ACM must not be reused.
- The activities could affect air and water quality. The associated risk is temporary and could be managed easily with the implementation of mitigation measures identified in the ESMP prepared according to ESMF.
- Septic tanks will be constructed to collect and withdrawn wastewater with the vacuum truck will be delivered to existing wastewater network or the closest WWTP , during the construction.

The risk level can be predicted as “low”.

ESS4: Community health and safety

- Contracted and primary supply workers will operate in the field and this situation increases the SEA/SH risk. The workers will be trained so that their presence does not impose any negative impact on the lives of local people during the construction process.
- All staff employed on the project will sign a written commitment to comply with the Code of Conduct.
- Sub-project-induced risks are not foreseen by disadvantaged or vulnerable individuals or groups.

The risk level can be predicted as “low”.

ESS5: Land Acquisition and Resettlement

Project aims to construct critical infrastructure facilities such as water, sanitation, and sewerage networks in earthquake-affected regions, specifically in Seyhan and Çukurova District, The project will not involve any land acquisition.

ESS6: Biodiversity and sustainable management

- The sub-project area does not overlap with any nationally or internationally protected areas having important ecosystem features.
- One of the primary concerns is the potential loss of trees located along the proposed stormwater drainage line. As part of the excavation and construction activities, it will be necessary to remove certain trees that are situated directly within the project alignment. So, any trees located along the project route must be relocated using the appropriate method and in accordance with the relevant institutions' recommendations. This may lead to localized habitat loss and a minor reduction in urban biodiversity.

The risk level can be considered “moderate”.

ESS8: Cultural Heritage

There are no historical or culturally significant sites in the project area. In the event that any cultural heritage is encountered, the chance find procedure outlined in the ESMP will be implemented. The risk level can be assessed as low

Upon the environmental screening of the sub-project, for the reasons explained above, the environmental risk rating of the sub-project is "moderate" since the possible impacts of the construction activities will be low to medium-sized impacts which can be easily managed/mitigated, are predominantly reversible, short-term, and are mostly limited to the project area and its immediate surroundings.

As a result of the project, the social risk is proposed to be "moderate"

Based on the results from the screening above, please list the E&S risk management instruments to be prepared/adopted and implemented:

a) Customized ESMP

b) Project-Level LMP

c) Project-Level SEP

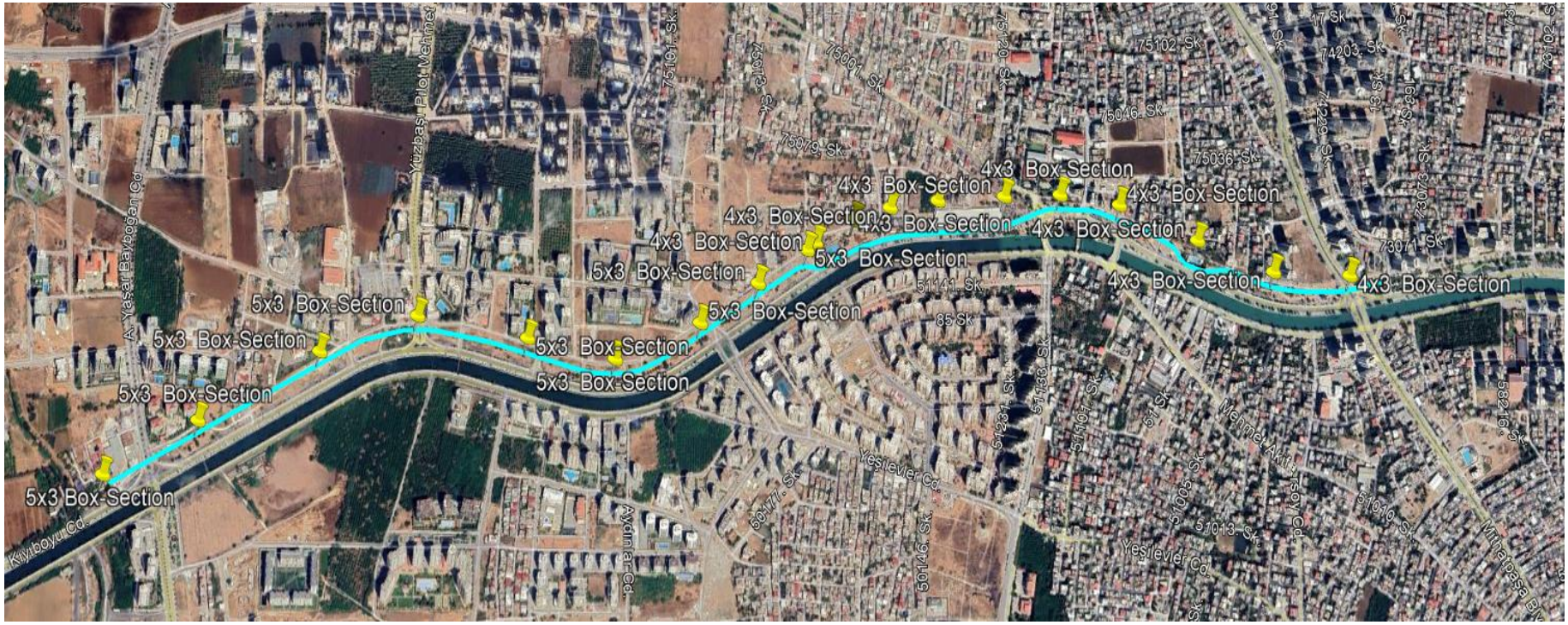
Project Management Consultant

Hasan Hüseyin Miraç Gül *Project Management Consultant's Environmental Staff*	*Environmental Expert*	*[Date]*	*[Signature]*
Özgür Dirim Özkan *Project Management Consultant's Social Staff*	*Social Expert*	*[Date]*	*[Signature]*
Mustafa Yıldızhan *Project Management Consultant's E&S Team Manager*	*Design Project Manager*	*[Date]*	*[Signature]*

ILBANK PIU

Nurgül DEMİRCİ	*Environmental Staff of PIU*	*[Date]*	*[Signature]*
Aslı Özer ÖZTÜRK	*Social Staff of PIU*	*[Date]*	*[Signature]*
Abdullah FURKAN	*E&S Team Manager of PIU*	*[Date]*	*[Signature]*

10.6.1. Annex-1 Google Earth View of the Kıyıboyu Stormwater Project



10.6.2. Annex-2 Google Earth View of the Esentepe Neighborhood Çamalağı Stormwater Drainage Project

10.7. Annex-7: Chance Finds-Notification Form

Reporting of Chance Finds - Notification Form

Part A **Bölüm A**				
Sub-Project Location: Proje Yeri:	District: İlçe:	Date: Tarih:	Form No: Form No:	Project Information: Proje Bilgisi:
Name Of Person Reporting Chance Find: Tesadufi Bulguyu Rapor Eden Kişinin İsmi:				
Was Work Stopped İn The İmmediate Vicinity Of The Chance Fınd? Tesadüfi Bulgunun Tam Çevresinde İş Durduruldu Mu?		□ Yes □ Evet	□ No □ Hayır	
Was A Buffer Zone Created To Protect The Chance Find? Tesadüfi Bulguyu Korumak İçin Tampon Bölge Oluşturuldu Mu?		□ Yes □ Evet	□ No □ Hayır	

Notification **Bildirim**				
Site Manager and E&S Manager Contacted Saha Müdürü ve Çevre Müdürü ile İrtibata Geçildi		□ Yes □ Evet	□ No □ Hayır	
Chance Find Details **Tesadüfi Buluntu Ayrıntıları**				
GPS Coordinates GPS Koordinatları	Photo Record Fotoğraf Kaydı	□ Yes □ Evet	□ No □ Hayır	(Hd Quality - No Cell Phone Photos) (Hd Kalitesinde -Cep Telefonu Fotoğrafı Değil)
	If Not, Explain Why:			

	Değil İse Nedenini Açıklayınız
	Other Records: □ Yes □ No Specify (Drawings, Hd Quality Videos, etc.): Diğer Kayıtlar: □ Evet □ Hayır Belirtin (Çizimler, Hd Kalite Videolar, vb.):

Description of Chance Find: Tesadüfi Bulgunun Tanımı:		
Description of Site/Finding And Other Specifications of Site/Finding: (E.G., Surface Sediment Type, Ground Surface Visibility, Distance To Closest Watercourse, etc.) Sahanın/ Bulgunun Özellikleri ve Diğer Özelliklerinin Tanımı: (Örn. Yüzey Sediman Türü, Yüzey Zemin Görünürlüğü, En Yakın Suyoluna Olan Mesafe, vb.)		
Part B **Bölüm B**		
Notification of Museum Directorate Archaeologist: Müze Müdürlüğü Arkeoloğuna Bildiri:		
Monitoring Archaeologist Contacted Museum Directorate Archaeologist İzleme Arkeoloğu, Müze Müdürlüğü Arkeoloğu ile İrtibata Geçti	□ Yes □ Evet	□ No □ Hayır
Date of Notification: Bildirim Tarihi:		
Name of Museum Directorate and Name of Museum Archaeologist: Müze Müdürlüğünün Adı ve Müze Müdürlüğü Arkeoloğunun Adı:		
Contact Number of Museum Directorate Archaeologist: Müze Müdürlüğü Arkeoloğunun İletişim Numarası:		
Decision of Museum Directorate Archaeologist:		

Müze Müdürlüğü Arkeologunun Kararı:		
Date of Site Visit: Saha Ziyaret Tarihi:		
□ Site/Finding of No Significance - Construction to Proceed with No Further Action Önemsiz Saha - Bulgu - Daha Fazla Araştırma Yapılmadan İnşaat Devam Edilebilir □ End of A Chance Find The Procedure Tesadüfi Bulgu Prosedürün Sonu	□ Site finding of Significance - Further Actions Required Önemli Saha - Bulgu - Ek Araştırma Gerekmektedir Please Fili Out Part C Lütfen Bölüm C'yi Doldurun.	
Date of Notice To Resume Work: İşe Devam Etme Tarihinin Bildirisi:		
Name of Museum Directorate Archaeologist: Müze Müdürlüğü Arkeoloğunun İsmi: Contact Information: İletişim Numarası:		
Site Manager and E&S Manager Contacted Saha Müdürü ve Ç&S Müdürü Ile Irtibata Geçildi	□ Yes □ Evet	□ No □ Hayır
Part C **Bölüm C**		
Further Field Investigation: Ek Saha Araştırması		
□ Site/Finding of Minor Significance □ Az Önem Taşıyan Saha/Bulgu	□ Site/Finding of Moderate Significance □ Orta Derecede Önemli Saha/Bulgu	□Site/Finding of High Significance □ Çok Önemli Saha/Bulgu
Describe Additional Work To Be Conducted: Yapılması Gereken Ek İslerin Tanımı:		

Date started:	Date completed:
Başlangıç tarihi	Bitiriş tarihi:

Date of notice to resume work:

İşe geri dönme tarihi bildirisi:

Name of museum directorate archaeologist:

Müze müdürlüğü arkeoloğunun ismi:

Contact information:

İletişim numarası:

Construction manager contacted	□ Yes □ No
İnşaat müdürü ile irtibata geçildi	□ Evet □ Hayır

10.8. Annex-8: Change Find Record

Date Of Discovery	Brief Description of The Accidental Find	Name Of Authorized Personnel Notified	Action To Be Taken	Incidental Find Notification Completed	Status On or Off	Other Matters

10.9. Annex-9: Contact Information

Museum Directorate	Address	Telephone	Fax	Email

Conservation Board	Areas of Responsibility	Address	Telephone	Fax	E-Mail

10.10. Annex-10: Minutes of Meeting for Public Consultation

MoM will be attached.

10.11. Annex-11: Grievance Summaries

Complaint Category			Total				Reporting Period			
			Registered	Pending*	Open	Open more than fifteen business days	Registered	Pending*	Open	Open more than fifteen business days
Appreciations										
Queries										
Requests										
Complaints and Concerns	Engineering	Improper engineering application/design								
		Prioritization of asphalting								
		Slow progress of construction works								
	Environmental	Disposal of hazardous waste								
		Disposal of non-hazardous waste								
		Dust/Mud								
		Impacts on the habitat/culture protected buildings								
		Noise								
		Odor								
		Random spoil piles								
		Other Issues								
	Land and Livelihood	Illegal acquisition of land								
		Impacts on the livelihood								
	Social	Community health and safety								
		Damage to personal assets								
		Disruption of public services								
		Esthetics								
		Inappropriate behavior of project staff								
		Occupational health and safety								
		Working hours								
		Other Issues								
TOTAL										

* Closing period is extended by the agreement with the complainant.